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LAKE CARRIERS' ASSOCIATION.

To consider and take action upon all general questions relating to the navigation and carrying business of the Great Lakes, maintain necessary shipping offices and in general to protect the common interests of Lake Carriers, and improve the character of the service rendered to the public.

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LAKE SUPERIOR HISTORY.

When Lief, the son of Eric, sailed away from his Iceland home, and, sailing ever west, finally reached the coast of Labrador, it seemed to his hardy Norse companions as if they had gone as far as could be asked of even the boldest daring. It seemed that even a Viking could go no further. But not far to the south lay the mouth of the St. Lawrence river. Had Lief and his companions persevered until this was reached they would have found the gateway to the very heart of the new continent. But this was not to be; and for six more centuries the great chain of lakes with Gitche Gumee at their head slumbered beneath their sun-reflected busoms unruffled save by the breath of the Spirit Manitou and by the bark canoe of the red man.

It was not until near the beginning of the 17th century that Du Luth, sailing on beyond the seething waters of the Sault, came to land at the head of the longest, broadest and deepest of the Great Lakes. Following him came the French voyagers, keeping time to their songs with the stroke of their paddles. Not far behind were the priests and missionaries of the Catholic church. In 1660 Father Mesnard lost his life on the Black river, whose picturesque surroundings and precipitate fall of 100 feet must have appealed with great force to the mind of the Chippewa who "saw God in the cloud and heard his voice in the wind."

From the earliest days the fur traders had established a station on Minnesota point. Later, one was established on what is now known as the Sweitzer tract. Here was located the old fort. Going on up the weird and winding waters of the St. Louis river, another post had been established at Fond du Lac. All this time no soundings, no charts, no maps had been made. Safety in sailing depended upon the individual skill of the sailor.

In 1829 the British government ordered soundings and a survey of the harbors and bays at the head of Lake Superior. This was done under the direction of Capt. Bayfield, for whom Bayfield city and county have since been named. The charts made by Capt. Bayfield have been in use from that time to this—71 years—and may be seen to-day upon the lake steamers.

During the 30's and 40's sailing schooners and vessels passed between Wisconsin and Minnesota points and entered Superior bay from time to time. Among them was the Algonquin, whose hull now lies beside the L avenue dock in Central Park. Another was the Ford, and a third the Neptune.

In 1853 the city of Superior sprang into existence and regular lines of steamships plied between the head of the lakes and Chicago and Cleveland. The times were lively and money was plentiful. Thus far no important work had been done on the harbor and the boats were compelled to hunt their way in and out the circuitous channel as best they might. Among the steamers for which Superior was the last port of call were the Elgin, North Star, Illinois, Keewana and Iron City. One of these was commanded by Capt. Alexander McDougall, who, even then, was a familiar figure on the streets of Old Superior.

Often times excursions were run to the head of Lake Superior and a boat lay over for a day of two. Brass bands sometimes accompanied the visitors and parades passed along the streets of the new town.

In 1860 a detachment from the marine engineering corps made soundings and a survey of the various bays and inlets constituting the harbor of Superior. The party came in the steamship Search, and was in command of George H. Meade, afterwards major-general in the United States Army and the hero of the field of Gettysburg. General Meade was here for two seasons and his friendly manner and affable ways made him extremely popular with the people of Superior. The general placed wooden stations on the headlands and established the base line on Minnesota point, since used in all descriptions of land in this vicinity.

Eighteen hundred and sixty came and with it the war of the rebellion. Duty called, and the gallant general sailed away.

In 1868 Col. Wheeler made surveys and improved the piers. Soon after, Congress made an appropriation for dredging the channel.

In 1870 provision was made for the Duluth canal and dike.

Under the present continuous contract work is progressing upon the channel to be 21 feet deep and 400 feet wide. The officer in charge is Major Clinton B. Sears, Corps of Engineers, U. S. A., to whose able supervision the head of the lakes is deeply indebted.—Evening Telegram, Superior, Wis.

BIDS FOR ARMOR PLATE.

The Acting Secretary of the Navy on August 10 opened bids at the Navy Department for armor for the battleships and cruisers authorized for construction. The circular calling for bids requested that prices be given for armor sufficient to cover all of the vessels either under construction or authorized for construction. As we stated last week, the Bethlehem and Carnegie Steel Companies submitted identical bids: $445 a ton with $45 a ton for royalty, for armor of class A, and for class B $400 a ton. The bids of these companies specified that the deliveries of the armor would commence in six months and would continue at the rate of 300 tons a month. Each of the companies bid for half of the entire contract. A new competitor, the Midvale Steel Co., bid this year for the contract. They, as we also stated, bid $436 a ton for all armor of class A. The bid for armor of class B was $380 a ton, but was conditioned upon a portion of the bid on class A. Unless an award of 20,000 tons was made the company, it did not undertake to accept the contract. Also, the Midvale company did not agree to make any deliveries for a much longer period than the other two companies.

The Acting Secretary of the Navy rejected all of the above bids on the ground that they were not favorable to the government. This does not mean that the Department will accept the alternative and erect an armor plant, but it will issue another advertisement calling for new bids on the armor. The reason assigned for the rejection of the bids is the demand made by all of the bidders for too large a proportion of the amount of armor plate. The new bids will be opened at the Navy Department on October 2.

STATEMENT OF NAVAL CONSTRUCTION

The degree of completion of vessels under construction for the U. S. Navy as shown by the records of the Bureau of Construction and Repair for Aug. 1, 1900, is as follows: Battleships—Illinois, 84 per cent.; Alabama, 98 per cent.; Wisconsin, 94 per cent ; Maine, 32 per cent.; Missouri, 9 per cent.; Ohio, 23 per cent. Sheathed protected cruisers.—Denver, 20 per cent.; Des Moines, 4 per cent.; Chattanooga, 7 per cent.; Galveston, 0 per cent.; Tacoma, 0 per cent.; Cleveland, 8 per cent. Monitors—Arkansas, 34 per cent.; Connecticut, 60 per cent.; Florida, 43 per cent.; Wyoming, 48 per cent. Torpedo boat destroyers—Bainbridge, 71 per cent.; Barry, 70 per cent.; Chauncey, 70 per cent.; Dale, 80 per cent.; Decatur, 77 per cent.; Hopkins, 63 per cent.; Hull 63 per cent ; Lawrence, 96 per cent.; MacDonough, 94 per cent.; Paul Jones, 75 per cent.; Perry, 75 per cent.; Preble, 75 per cent.; Stewart, 31 per cent.; Truxton, 28 per cent.; Whipple, 28 per cent.; Worden, 28 per cent. Torpedo boats—Stringham, 98 per cent.; Goldsborough, 99 per cent.; Bailey 95 per cent.; Bagley, 73 per cent.; Carney, 93 per cent.; Biddle, 53 per cent.; Blakely, 90 per cent.; DeLong, 90 per cent.; Nicholson, 70 per cent.; O'Brien, 73 per cent.; Shubrick, 89 per cent.; Stockton, 94 per cent.; Thornton, 87 per cent.; Tingey, 61 per cent.; Wilkes, 53 per cent. Submarine torpedo boat—Plunger 85 per cent.

FOR SHIPOWNERS AND BUILDERS.

The following has been forwarded to us by Commissioner of Navigation E. T. Chamberlain, with the very pertinent remark that there may be also an opportunity for American shipowners.

In the same report of the British Acting Consul-General at Rio, it is urged that British shipowners should note that there is an almost complete want of small or middle-sized sailing vessels at ports on the Brazilian coast, say vessels of 300 to 700 tons deadweight, so much so that exporters have been obliged to ship by steamers' cargoes for which sailers were preferred, as, for instance, salted hides for British and Continental ports for which very high freights would be paid, say 35s. per ton. For coffee, also for the South African ports, extremely high freights are paid, and a very brisk business is expected with these quarters as soon as peace is re-established. It is also stated that vessels loading 6,000 to 10,000 bags (360 to 600 tons or 1,000 kilogs, each) will find employment at freights of £600 to £1,000 or more.—From the Board of Trade Journal, London, August 2, 1900.

MORE FACILITIES AT THE "SOO."

The declaration by Chairman Burton, at Duluth, that there will have to be a new and larger lock at the Sault, is proof that the committee now realizes the great importance of the canal. He favors a lock of twice the dimensions of the present lock, and stands for immediate action on the proposition. It will take years to complete a new lock, and in the meantime vessels will be built that can utilize the new interlake channels to their utmost. It will therefore be wise to make the new lock as commodious as possible.

The committeemen who have been visiting the ports of Lake Superior have become so deeply impressed with the importance of the lake shipping trade that it ought to be an easy matter to win their support for any reasonable project calculated to improve the shipping facilities of Milwaukee. It would be asking too much to request a deepening of our rivers at government expense. Only Chicagoans have the assurance to go that far. But the government should make the outer harbor, and the channel between the harbor piers, equal to the demands of the commerce of the psesent and that of the near future.—Evening Wisconsin.

CLEVELAND.

Special Correspondence to The Marine Record.

Mr. Quincy Miller met with a slight accident at his boiler shop this week, and his injured foot will cause him to remain home for a few days.

J. Q. Riddle, Vice President of the Lockwood-Taylor Hardware Co., of Cleveland, O., which does a considerable business in rope and binder twine, was a visitor in New York last week.—Cordage Trade Journal.

The blockade at the Sault caused by the grounding of a large steel tow barge across the channel at Sailors' Encampment has been raised, and at Lake Erie ore docks many vessels are now waiting their turn for unloading. The channel was cleared on Saturday night, and vessels passed down by the score.

There is no change in the ore freight situation, and shippers say that there is nothing in sight that indicates any improvement. Cargoes are scarce all around, but there is not much tonnage on the market. No charters have been reported for a number of days, and rates are still quoted at the old figures.

Lake freights are unchanged and no chartering is reported. An inquiry for head-of-the-lake tonnage for the balance of the year, for a block of 25,000 tons of ore, brought an offer of 65 cents or about half the contract rate. There is any quantity of shipbuilding contracts awaiting the return of a moderate figure on steel. Five more large vessels were contracted for here this week.

Two more of the Rockefeller boats have gone into ordinary. They are the steamer Trevor and barge 129. These boats unloaded here a couple of days ago, and cleared Tuesday for Erie. They went down light, and will lie in the bay there with the other boats which went away from here a few weeks ago. These boats are tied up now because there is nothing for them to do, at the freight rate required.

A few charters of vessels to take coal from Ohio ports to the head of Lake Superior are reported at 35 cents, but there are also some at 30 cents, and the rate has evidently been reduced to the latter figure. The rate to Portage is still held at 35 cents. The only shipper who has any ore to offer from the head of Lake Superior says he can get vessels for two trips at 65 cents, but on the other hand brokers claim they are offered Marquette cargoes at 75 cents.

The encampment of the Knights of Pythias at Detroit is to cause an enormous passenger movement on the lakes, the latter part of this week. The Detroit & Cleveland line has been made the official route for Ohio companies to Detroit, and the business promises to be something immense. Railroads all through this section of the State are announcing excursions for Saturday to Cleveland and Detroit, and intend to hand their business over here to the D. & C.

There is no change in the freight situation and very little chartering is being done. There are a number of vessels on the market for Lake Superior cargoes. The demand is light, but no change is noted, as no charters are being made. There is more inquiry for lumber carriers than there has been at any time since the opening of navigation, and some of the vessels that have been carrying ore are going into that trade. A number of vessels were placed to load at the head of the lakes for Lake Erie at $2 this week. Milwaukee coal cargoes are offered freely, and there are not many vessels on the market for that port. Offerings of Lake Superior tonnage are liberal and the feeling is easy, but rates hold steady at 35 cents to Portage and 30 cents to the head of the lakes.

Mr. Herman, passenger agent of the Cleveland & Buffalo Transit Co., appears to know his business from the ground up. The latest, and one of the best points of advertising evolved by him, is a framed, colored lithograph about 26x32 inches, taken from a photograph at the time of the maiden trip of the large, handsome side-wheel steamer City of Erie. The picture, of which one has been presented to your correspondent, is entirely out of the usual glaring steamboat route advertising order, and is worthy of the space on any man's walls of house. Mr. Herman's advertising proclivities in a telling and discreet manner is unequaled up to the present, although, passenger agents from Buffalo to Duluth, inclusive of rail and lake, are purty slick codgers, as a rule, and at every stage of the business where it comes into the game of securing patronage.

In regard to the libel of the steamer Inter Ocean, which was tied up by the St. Clair Steamship Co., owners of the schooner Fontana, the Detroit Free Press says: The story of the disaster, as related in the libel, is quite interesting, and contains information now made public for the first time. It says that at 11 o'clock on the night of Aug. 3, those navigating the Kaliyuga made out the lights of the Appomattox and Santiago. A short distance back of them, to the west, could be seen the lights of the Inter Ocean. When the two tows were still a mile apart the Kaliyuga blew two whistles, indicating her desire to pass to the port, or Canadian, side of the Appomattox and consort, thus taking him out of the way of all three boats going up. The Appomattox promptly answered. Later, to be sure of his position, the Kaliyuga's master repeated the two blasts, and the Appomattox did likewise. Immediately after the first signal the Kaliyuga began to pull over toward the Canadian side. At the second signal the Kaliyuga checked down until the red light of the Santiago was shut out of view, when her master rang his engineer to go ahead at the usual speed. She had hardly time to attain it when she and the Santiago were nearly abreast, and the latter began to sheer toward the Kaliyuga. To avoid the schooner, the Kaliyuga's wheel was put hard a-starboard, and she was checked down. The Santiago passed the Kaliyuga's bow by twenty feet, and her starboard bow grazed the starboard quarter of the steamer, which had meantime swung her wheel hard a-port to avoid the schooner at her stern. When the schooner began her sheer the Kaliyuga's master blew a danger signal to his consort, the Fontana. Just as the latter began to swing to port, in obedience to the signal, she was struck at the bluff of the starboard bow by the Santiago, which it is alleged was traveling seven miles an hour, while the Fontana was going at the rate of six. The most interesting point of the whole story relates to the part played by the Inter Ocean. It is charged that she was but a short distance from the Santiago at the time of the collision, and trying to pass the latter; that a current setting partly crosswise "walled" up the water between her and the Santiago, and that this current was of such volume and power as to cause the big schooner to sheer, and that once she began to sheer her rudder, had little if any control of her. The usual allegations of poor seamanship, negligence of lookouts, etc., are charged against the three by the Fontana. The damages claimed are as follows: Loss on hull of Fontana, $60,000; loss on cargo, $12,446; on charter, which was for the season at $1.10 on ore from Marquette and Presque Isle to Lake Erie ports, $15,000; on freight of the trip, $2,852; on crew's effects, $400; total, $90,698.

BUFFALO.

Special Correspondence to the Marine Record.

There is a kick coming about the price of fueling steamboats and the price must and will be reduced as the freight rate drops off.

Another of the cribs for the new breakwater at Fairport left the Donnelly Contracting Co's. yards this week, in tow of the tugs Willson and Clark of the Maytham fleet.

The Celina, the new boat which was built at the Middleport Dry Dock for the Buffalo & Rochester Transit Co., has been launched. Her dimensions are 93x17½ feet. She will draw six feet of water when loaded. The Celina was designed as a fruit and excursion steamer.

Shipments by lake only amounted to 60,000 tons this week, of which Chicago took 22,000 tons and Milwaukee 15,000 tons, the balance reached the minor ports. Freight rates simmered away down to horrible figures, only 30 cents is being paid to the head of the lakes, Chicago and Milwaukee also Gladstone. The side ports range from 25 to 50 cents.

With its principal business office in Brooklyn, the International Navigation Co. was incorporated at Albany, this week, to carry on operations on Lake Ontario, Lake Erie and the Niagara river. The capital stock is $200,000 and the directors of the company are William P. Williams, William C. Davidson, Gustave J. Wiederhold, Frank H. Meeker and Milton I. Williams.

Buffalo is getting ready to show the western hemisphere how to give a bang-up show. The Pan-American exposition, which will open May 1, 1901, will be an up-to-date combination of the Chicago and Paris world's fairs, given for the exclusive benefit of this side of the world. The twenty large buildings are in process of construction. Officials in charge claim the buildings will all be ready for occupancy when the exposition opens. The erection of the buildings and equipment of the grounds will cost nearly $6,000,000. The exposition will cover a tract of 350 acres. Three thousand men are at work on the grounds.

Shipments of coal to Lake Michigan have fallen of considerable the last week, and the tendency is still downward. It is expected that the weakness of the trade will result in another attack on existing rates by the shippers. Duluth experienced a falling off in the fuel shipments about two weeks ago, and no sooner had the rate been lowered than the shippers set themselves for another battle. The Black Diamond says that the same experience is confidently expected in the Lake Michigan trade. Coal has been sent forward in immense quantities since navigation opened, and the present dullness is only the natural reaction following an unusual activity.

The Union Dry Dock Co., which began its season's work very late on account of the long strike of the ironworkers, now has the two steamers for which it contracted last winter well under way. Both are in frame and about half plated. The one for John L. Crosthwaite and others, intended for salt water, will be finished first and ought to be in the water before the end of September. It does not now look as if the Lehigh Valley liner would be ready for business this fall. Capt. Chas. Maytham will not close contracts for his steel tugs right away, according to good information, as he thinks steel will go still lower; and besides, by distributing his contracts well over the lakes, he can make sure to get the work done the coming winter anyhow.

DULUTH—SUPERIOR.

Special Correspondence to The Marine Record.

J. Hogan, of the steamer Mohawk, had his foot crushed by a quantity of copper ore that fell on it. He was taken to St. Luke's hospital.

Wm. Getty, on returning from a western trip, says that Peter Patterson, of Duluth, is in Tacoma engaged in buying timber for a Duluth firm. Many Minnesota, Wisconsin and Michigan lumbermen are in the west on similar business. Mr. Getty reports Tacoma a fine and orderly city; but thinks Seattle rather a swift town.

It has been reported that owing to a demoralization of railway rates, much grain tributary to Duluth has been going to Chicago of late. In order to check the tide the Great Northern Elevator Co. has decided to abandon elevating and storage charges at its West Superior houses for a month, or longer if necessary. On due inquiry I can't learn that the Great Northern makes any rebate on former charges, and therefore the rumor is away off.

J. C. Foley, after whom the Foley mine in the Seine river gold district was named, made a recent visit to the mine and found things in a most gratifying condition. A new and richer vein has been encountered and the mine now has 15,000 tons of ore in sight that will "go" $60 to $75 a ton. Other mines in the Rainy river district are also in a prosperous and promising condition. The water in Rainy and Shoal lakes is seven feet lower than ever before known, and this will prevent the shipment of needed machinery until a rise shall come or the railroad now in course of construction shall be completed. Mr. Foley believes the Rainy river region will become in time a very large producer of gold.

The story told about Capt. Maytham making a contract for a round dozen of tugs to be built at West Superior, has, after all, a kind of truth. The tugs, however, will not be built at West Superior, nor indeed at any one shipyard, but ten of them will be built at different points on the lakes. At least so goes the yarn, but Maytham himself is not talking very much. It is stated that Maytham can obtain plenty of money in New York on easy terms, to cover the venture. The new tugs are to cost about $20,000 each. As to some understanding being reached between the contending lines, it is predicted in some quarters that by next season the two will have spent money enough to satisfy them as a war measure, and may be willing to divide up the business peacefully and resume the old plan of towing in turns, which worked so well here. On the other hand the Great Lakes Towing Co. is well heeled, and can call for any amount of capital to do all of the work required.

Interest in the visit of Chief Willis L. Moore, of the Weather Bureau, to the head of the lakes is felt, as he will probably investigate in regard to the placing of one of the new storm signal towers at this point. The present location of the weather, in the Federal building, is not all that could be desired, as far as the display of storm warnings is concerned. From many points in Duluth harbor and many more in West Superior and Superior, the signals, whether night or day, are invisible. There are plenty of good sites where the signal tower could be placed and the signals displayed could be seen to advantage. These towers are constructed of open steel work and stand about fifty feet high. On top of each of them is a steel flagstaff twenty-five feet high, making the total height of the structure seventy-five feet. They will be stationed at the principal harbors along the lakes. Upon them will be displayed signals giving warning of heavy gales and storms. These signal displays are of inestimable value to the sailors of the Great Lakes. Chief Moore's work has been principally in this section. He is deeply interested in perfecting the marine service and these signal towers are a step in that direction.

ESCANABA.

Special Correspondence to The Marine Record.

George Robinson, the life-saver who was struck down by lightning last spring, at Ludington, is still suffering from the accident which nearly caused his death. He experiences frequent attacks of sick headache and his hearing is somewhat affected. It is doubtful whether he will fully recover from the terrible shock received while on duty on the lookout.

The wooden steamer Argonaut sprung a leak on Sunday morning, after taking on a cargo of iron ore, and sunk at her dock. One of the steam pipes in the boiler blew up under the pressure, and A. A. McFarland, a fireman from Port Huron, was severely scalded. He was taken to the marine hospital, and the physicians report his condition as very favorable. The Argonaut was all ready to leave here when the leak was discovered. The water poured into the hold so fast that the pumps could not keep it under, and the steamer sank in a short time alongside of dock No. 3.

A tortoise is not a particularly lively companion as a domestic pet, though students of natural history may find much interest in observing him and his ways. His tendency to sleep for months at a spell is in the A B C of natural history, but in one case has been known to lead to excitement and fun. A tortoise that was "used" as a domestic pet in a parson's family once chose the coal cellar as his place of hibernation. A new cook in the meantime was engaged, and she knew not tortoises. After a month or two the tortoise woke up and sallied forth. Screams soon broke the kitchen's calm. "My conscience," yelled the cook in awe, as with unsteady hand she pointed to the tortoise. "Look at the stone that I have broken the coal wi' a' winter!"

CHICAGO.

Special Correspondence to The Marine Record.

Grain freights are without change at 1¼ cents for wheat and 1⅛ cents on corn to Lake Erie.

George B. Carpenter & Co.'s net factory at Indiana and Orleans Street, was damaged by fire August 2nd. The loss to the building is placed at about $1,coo, and to stock, $3,000.

Three cargoes of wheat were placed at 1½ cents to Buffalo. On corn 1¼ cents was offered and 1⅜ cents was asked. Cargoes are badly scattered and higher rates are being paid for some lots.

The schooner Ashland sprung a leak while unloading iron ore at the Illinois Steel Co.'s plant on the Calumet on Tuesday. The vessel had cleared for Superior, but was finally taken to drydock for repairs.

The Chicago & Muskegon Transportation Co., of which Capt. Miles Barry is the head, has been acccrded joint tariff rates by the Pere Marquette Railway Co. This places the Barry company on equal terms with the Goodrich line at Muskegon.

The steamer S. S. Curry in trying to get into the new slip of the Illinois Steel Co. at South Chicago Sunday, went on a sandbar. There she stuck until late Tuesday night. The tug bills incurred amounted to over $600 before the steamer was pulled into deep water.

Last week the Sheriffs Manufacturing Co., of Milwaukee Wis., shipped a 56-in. wheel to Charleston S. C., and a 60-in. wheel to Manistique, Mich. A 9 ft. wheel is now being made for the steamer Albert Soper, and there are many other wheels under way in the company's foundry for vessels in all parts of the country.

Shipwreck benefits have been paid all of the survivors of the barge H. W. Sage, which went down off Algonac. Each man got $30 from the Lake Seaman's Union, and this will enable him to replace his outfit. The indemnity paid the Sage's crew is the first ever paid by the association. It is the first time any such claim has been made to the organization.

A successful test was made of the new Mead clam hoist at the docks of the Philadelphia & Reading Co. at South Chicago this week. In six hours 1,785 tons of coal were taken out of the steamer P. D. Armour. The entire cargo of 2,835 tons was unloaded in about twelve hours. This is about half the time required under former hoists at this dock. The new invention does away with the work of eighteen men in the hold to scoop the coal except in cleaning up the cargo.

A revolution in telegraphy seems at hand. Z. G. Sholes and A. G. Gilmore, of Chicago, have invented a method of sending dispatches by pressing the keys of an ordinary typewriter, and the dispatch is received written out on another typewriter at the receiving end of the line. The Chicago Times-Herald claims the method has been fully perfected and will be inaugurated and in use in a short time. A few experts will be required to keep things in order, but it is asserted that the great army of telegraphers will be displaced by typewriters.

The Chicago Pneumatic Tool Company reports a gratifying increase in its sales for July over the corresponding month of last year, this being a repetition of its history from year to year since the organization of the company. Among the notable orders received during the month were the following: Entire order of the General Electric Company, Schenectady, N. Y.; entire order for the equipment of the addition to the Cramp ship yards at Philadephia; entire requisition of the Philadelphia & Reading Railway; the order of the Maryland Steel Company at Sparrows Point, Md.; entire order of Riter-Conley Company, Pittsburg, besides large and increasing orders from foreign countries. During the month the Richmond Locomotive Works placed an order for thirty-four No. 3 Boyer drills, in addition to the large number already in use by that company.

There has been more trouble in the river this week due to the up stream current. The steamer Thomas Davidson, which had loaded grain at the Santa Fe elevator, was caught at the Main street bridge and swung across the river and held fast, completely blocking the channel. Tugs failed to move the steamer and it was not until the authorities of the drainage board could be reached and the flow shut off at Lockport that the Davidson was released, having spent fifteen hours across the river. Again on Sunday morning the Canada-Atlantic liner Kearsarge collided with Lake street bridge, and both boat and bridge suffered considerable damage. The Kearsarge was bound up the south branch, stern first. She got away from the tugs, and after striking the stone abutment on the west side, she sheered over into the center pier. The overhanging stern tore up the sidewalk on the bridge for twenty feet, and the pier itself was broken in two. The steamer suffered damage to her upper works, her wheel was broken and some plates bent. I will later make a list of local casualties due in part to the current of the river.

"I HAVE discovered," remarked the boarder with the pink suspenders, at the evening meal, "where we can obtain cheap board." Everybody looked up anxiously and waited for him to continue. "Where?" eagerly asked the boarder with the green-striped shirt, speaking for his fellow-sufferers. "At a lumber yard," cruelly replied the heartless wretch.—Philadelphia Call.

KINGSTON, ONT.

Special Correspondence to The Marine Record.

On Thursday the 16th the steamer Rosedale, of Chicago, discharged 45,000 bushels of corn at Richardson's elevator.

The new big steel steamer Strathcona, built in England for McKay Bros., Hamilton, passed up on Friday morning.

The government dredge Nipissing, conducting operations here for some time past, has left for Port Hope to dredge the harbor there.

On Friday the 17th the steamer Unique, lately sold by the Rapid Transit Co., of Ogdensburg, sold to Alexandria Bay parties, was on her way to Ogdensburg with 300 Kingston excursionists on board.

The steambarge J. G. Nichols was on Monday the 20th in Davis' dry-dock for repairs. It is expected that she will be chartered by the United States government for a survey on the St. Lawrence to be shortly made.

Since the recent St. Lawrence canal improvements by using the Soulanges canal, instead of the Beauharnois, steamers make the trip between Montreal and Kingston in an hour and a half less time than before.

Charles and Leopold Meyers, largely interested in the Catarogin Mining Co. to establish an iron ore smelter in the city, will be here next week. It is expected the new company to build here will be incorporated then, and in a few weeks building operations will start.

Thursday morning the steamer Strathcona, a very large vessel, went through the locks of the St. Lawrence canals, passing Kingston at night on her way to Toronto. She is a new vessel, built at Dundee, Scotland, and weighs 1,456 tons, with a carrying capacity of 3,500 tons. She was a close fit in the locks.

Word has reached here that Alex. Constans, a native of Cornwall, was taken off the tug Chieftain at Cornwall the early part of last week, suffering from a disease which subsequently was diagnosed as smallpox. Dr. Hamilton, health officer, immediately wired to Quebec, and had the steamer quarantined. Young Constans died on the 14th inst.

A steam steering system will be put in on the R. & O. N. Co. steamer Bohemian this fall. This steamer runs the rapids so often that it is important her steering gear should be in first-class trim and respond readily. The recent accident to the steamer Spartan will likely result in the steering apparatus of all the R. & O. Navigation Co.'s steamers, running the rapids, being remodeled.

On September 5 and 6 will be held in Kingston the annual convention of Knights Templar, one of the highest branches of the Masonic order. The delegates will convene here, and there will not be less than 300 of them. Many of the uniformed rank will come along, so that for the time being Kingston streets will abound with handsomely uniformed men. The council will likely entertain the delegates.

At Alexandria Bay, 25 miles from here, on August 15, a gasoline launch owned by the Lances, of Watertown, became disabled. The ladies on board, viz: the Misses Emeline Lance, Florence Lance and Alice Davis were in full dress but jumped overboard, as the propelling apparatus had caught fire and they feared the gasoline would explode. They were picked up by the occupants of skiffs coming to the rescue.

The first steps in connection with the city either organizing the present plant of the Kingston Light, Heat & Power Co., or else establishing an electric plant of its own was begun yesterday, when the civic fire and light committee met and resolved to recommend to the city council that a legal firm in Toronto be consulted as to the best mode of purchase. The city can avail itself of the terms of contract with the present control, or else proceed under the Conner act.

Collector Hamilton, of the Kingston customs department, has fined the steamer Empire State $200 because a passenger got off at Brophy's Point, 4 miles from here, and the landing waiter was not there to examine his baggage until he was on his way to the hotel. The penalty in this case is rather a severe one, inasmuch as the company had nothing to gain by landing the passenger at the point, but did it merely as a matter of accommodation. Mr. Hamilton must be drawing the line pretty fine when he will fine a company $200 because they accommodate a passenger.

It is understood that another attempt will be made to raise the old Oconto, the large freight and passenger steamer which was sunk near Thousand Island Park fourteen years ago with a valuable cargo of silk and pig iron on board. She was sunk near Rock Island light station and now lies in about ninety feet of water. Divers are expected soon and the work of raising the remainder of the valuable cargo will be at once begun. It is understood that a stock company has been recently organized which will back the undertaking. When the Oconto was sunk the owners immediately claimed the insurance and surrendered all rights to the insurance company. The company never made any attempt to rescue the cargo or raise the boat and she lay where she was sunk fourteen years. About four years ago a stock company was organized by some speculators and effort was made to raise the cargo. It was late in the fall when the divers began work and they did not accomplish much. A few hundred dollars worth of silk in tin cases was taken up and sold and then further effort was given up.

Among marine men the talk has been revived about the government charging all steamers going down the river to Montreal for the use of the St. Lawrence canals, whether they run the rapids on the down trip, or not. The steamers must pay for both trips, although they only use the canals coming up. The only reason for charging for the canals is that the government holds that the rapids are not navigable. Marine men, however, oppose this contention, and claim that the rapids are navigable, since steamers are constantly going through them. The matter will likely end in concerted action against the present system of rates which has been in existence for years.

The story comes from Oswego, N. Y., that the New York Central people contemplate putting on steamers from Lewiston, Charlotte and Oswego to Alexandria Bay. The steamer Arundel is on the route and is taking trade from the Central's branches. The steamer Toronto is also securing many passengers from Rochester, Syracuse and Buffalo, that would otherwise go to the Central. The boats to be put on will be chartered for the first season. They will be the largest, swiftest and staunchest to be had for Lake Ontario navigation. During the spring and fall they can go into other trade. The introduction of these boats will bring trade to the Richelieu & Ontario Navigation Co.'s boats on the St. Lawrence run.

When near Round Island, just below Thousand Island Park, and near a small island known as Castle May, a slight explosion took place on the steamer Uniqne and it was found that something had gone wrong with the machinery. The break was in no way serious, and, although there was some slight confusion on board, especially among the ladies, things became settled in a few moments. The steamer remained stationary for a time at a shoal near the place named till steam was got up, and then proceeded to Alexandria Bay. Only one of the two boilers could be used, so the steamer's progress was much slower than her usual rapid rate. The trip to the 'Burg was abandoned, the Unique, instead, waiting at the Bay till about 3:15, and then leaving on the return trip, arriving at the wharf at 7 o'clock exactly. Some of the passengers returned to the city at 3:30 on the steamer Toronto, and it was from them that the first intimation of the accident was received. Mr. Thomas Laidlaw, manager for the Rapid Transit Co., and largely interested in the boat, asked about the accident, claimed it was nothing out of the ordinary. Two of the flues in the boiler burst, and the steamer, after waiting for a few minutes to get up steam again, had proceeded on her way. The steamer, after bringing her passengers to Kingston, went to Ogdensburg where she was repaired.

SUPERIOR CITY.

Special Correspondence to The Marine Record.

The city of Superior has become one of the commercial centers of the Northwest. It is expected that the federal census will give the city a population of nearly 32,000. It is situated at the mouth of the St. Louis and Nemadji rivers and on the bays of Superior, St. Louis and Allouez. Its harbor and docks will receive the largest boat on the Great Lakes, and the extensive iron ore docks have a sufficient capacity for this industry. According to the Sentinel, Milwaukee, the city is delightfully situated from a commercial standpoint and has special advantages. From its ten extensive coal docks and its numerous merchandise docks a large extent of the western territory receives supplies from this distributihg center, utilizing the various Western trunk lines that run into the city. These are the Chicago, Minneapolis & Omaha, the Northern Pacific, the Duluth, South Shore & Atlantic, the Duluth & Winnipeg, the Wisconsin Central, and the Chicago & Northwestern, the two latter roads coming in over the Northern Pacific from Ashland. The Chicago, Milwaukee & St. Paul is expected to enter Superior in the near future. The annual output of the lumber industry which is shipped from this port is immense. Its flour mills, the property of the United States Milling Co., have an aggregate daily capacity of 25,000 barrels. The other manufacturing industries of the city are varied and extensive, including steel barge works, boiler works, foundries and machine shops, iron works, stove and range works, smelting yards, mammoth coke ovens, steel mills, brick yards, breweries, soap factories, woolen mills, wind mills, cooper shops, etc. The city contains immense ore docks, six giant grain elevators, and has an excellent system of waterworks, an electric street railway and an electric light plant. There are twelve banks, a large public library, three hospitals, several opera houses, ten weekly and three daily newspapers. The city is justly proud of its excellent educational facilities, which include public and paroachial schools, a high school and a state normal school. There are thirty handsome church edifices, belonging to congregations of nearly every denomination.

SCHOONER RELEASED.

The following telegram has just been received:

GARDEN CITY, ONTARIO, August 23.

MARINE RECORD, Cleveland.

Schooner S. H. Dunn, owned by E. L. Kelsey, of Detroit, coal laden for Kingston, which ran ashore on the Myles shoal yesterday, was successfully released by the Calvin Company's wreckers in charge of Captain Tom Bryan, with tug Parthia and lighter Augustus; the vessel is leaking slightly, but damage not considered serious. A. MALONE.

"How was Admiral Dewey's naval rank reduced when he got married?" "He became Mrs. Dewey's second mate."

INVENTIONS OF EMPLOYEES.

In general, the law secures to every man the ownership of his own inventions and of the patents granted therefor. But this general principle is much modified by the special relations existing between the employee and his employer in particular cases. A wide distinction is made between the person who is employed merely as a skilled workman and the person who is employed as an inventor.

As to the former: If a skilled workman, while in the employ of another, but in his own time or after hours, conceives an invention and constructs it at his own expense, using his own tools and materials, and doing the work after hours, or in time his employer does not pay for, then the invention, as well as the patent granted therefor, is the exclusive property of the workman. The employer has no rights in it, nor any right to use it in his business, even though it is adapted to that business. The employer, in this case, can obtain the right to use the invention only by contracting with the workman for it, and paying the price agreed upon. But if the workman conceives the invention in the time his employer pays for, and constructs it with his employer's tools and materials, and in the employer's time, then the employer obtains certain rights in the invention and patent granted therefor.

If the invention is a machine, then the machine belongs to the employer, and he has a license to use it in his business and to keep it in repair, and without paying any royalty to the workman therefor. If the employee obtains a patent for the invention and sells it, that sale will be subject to the license to the employer and the purchaser of the patent cannot prevent the employer from continuing to use the machine.

If the employer is running a machine shop, for example, and, after the patent is granted, converts his business into a corporation so that the corporation is rather the continuation of the old business than a new concern, the license to use and repair the machine continues over to the corporation. If the invention is not a machine, but is an article of manufacture, as a tool in which the employer deals, then, in the circumstances supposed, the employer has a license to make and sell such tools without paying royalty, even after the patent is granted; and neither the inventor nor the purchaser of the patent can stop him from continuing to do so. In this case, also, the employer's license continues over to the corporation into which the employer's business is converted.

If the invention is a process, then the employer, or the corporation which continues his business, has a license to use that process, without paying royalty, even after the patent is granted to the workman.

In these cases, however, the license to make and sell the machine or the article, and to operate the process is not exclusive—that is, it does not give the sole right to the employer—it only secures to him a right to the invention in connection with his particular business; and the inventor, or those to whom he sells the patent, can make use, and sell the invention, and license others to do so, without let or hindrance from the employer.

As to persons employed to invent: If a person is employed by another to make inventions to be used in the employer's business, and is paid salary or wages on the understanding that his services are to be those of an inventor in improving the machines, tools, or processes which relate to the employer's business, then the inventions which the employee makes relating to that business, and the patents granted therefor are the exclusive property of the employer. In such cases, the court says that the employee, in making and perfecting inventions, is merely doing what he was hired to do.

Should the employee leave that employ, he cannot use, or make, or sell the invention, or convey any rights to others under it, except with the consent of the employer.

Related to the question of the rights of employers and employees to inventions of the latter, is that of the rights of the one to conceive the invention, and of the skilled workman who is employed to perfect it.

In general: If A conceives an invention (which includes an idea of means to put it into operation) and employs a skilled workman, B, to perfect it, then A, and not B, is the inventor of the whole machine, article or process, including any merely subsidiary invention which B made in developing A's ideas, and A alone is entitled to the patent.

If, however, the idea merely occurred to A that it would be well to do a certain thing, and he had no notion or the means to do it, then B is the inventor. A's rights as a license, under, or owner of, the patent, will depend upon the special relations between A and B, as above considered, or upon the express contracts between them. But the applicant for the patent must be B.

It is unfortunate that the relations of employees and employers are often such as to prevent an explicit understanding between them, at the time the invention is being developed, of just what their rights are to be. Influenced by what seems their present interest in "keeping quiet," and trusting that something will happen that will enable them to secure more than the law will give them on the facts at the time, both parties avoid definite understandings; until after the lapse of time, when the real facts are forgotten, and perhaps the invention is becoming important, both unconsciously or consciously distort the facts in their own interest, and serious disagreements arise, which sometimes wreck the business and almost always injure the employee.

The security of both the employee and the employer requires that the relations of the parties should be explicitly agreed upon when the invention is developing, and that the terms of the agreement should be committed to writing. D. Walter Brown, in Power (N. Y.)

PIPE BENDING.

Pipe bending is a job which is often required of an engineer in an emergency, or may be required in setting new tubes in some of the types of water tube boilers which have bent pipes for heating surfaces. Power recommends, as the most practical method, to fill the pipe to be bent with perfectly dry sand and plug or cap the ends so the filling will be retained under quite severe handling, taking care to thoroughly fill the pipe with the sand, and also that there is nothing inflammable or damp in it, as necessary heating is liable to cause serious explosion. When pipes are small and the bends are not sharp, the bending may be accomplished without heating. But for making sharp bends in small pipe, or bends of any considerable degree of curvature in large pipes, the portion to be bent should be heated, avoiding overheating. The best results will be obtained if the heat is not carried above a dull cherry red. It will be necessary to bend and heat several times in making short bends. After heating the portion to be bent, the pipe should be placed in a vise as close as possible to the location of the bend but without grasping the red hot part. The outside of the curve should be cooled with water. The inside will compress with very little tendency to flattening if not bent too far at a single setting. Any slight flattening may be brought back to circular form by squeezing in the vise before it has gone too far.

When a large number of pipes are to be bent, shape formers are employed, but when correct formers are not used a template made of ¼-inch iron bent to the desired curvature for the side of the pipe should be made so as to be laid on the side of the pipe while bending to give a guide for the operator. When the radius of the curve is fifteen times the diameter of the pipe, or more, the use of water for cooling the outside of the curve may usually be dispensed with.

NOTICE TO MARINERS.

DOMINION OF CANADA—ONTARIO.

LIGHT ON STAG ISLAND SHOAL.

A pole light, established by the Government of Canada on the south end of Stag Island Shoal, River St. Clair, was put in operation on or about the 28th ultimo.

The light is shown from a lens lantern, hoisted on a mast with a small shed at its base, the mast and shed painted white; they stand upon a platform, built on a pile foundation. The platform is elevated 4 feet above the summer level of the river, and the mast is 7 feet high. The piles are driven in 8 feet water a short distance north of the spot hitherto marked by a middle ground spar buoy, which buoy will no longer be maintained.

The light is fixed white, elevated 10 feet above the level of the river. It should be visible 4 miles in every direction, except where obstructed by the mast. The illuminating apparatus consists of a pressed glass lens.

F. GOURDEAU,

Deputy Minister of Marine and Fisheries.

Department of Marine and Fisheries,
Ottawa, Canada, 2nd August, 1900.

☞ All bearings, unless otherwise noted, are magnetic and are given from seaward, miles are nautical miles, heights are above high water, and all depths are at mean low water.

Pilots, masters or others interested are earnestly requested to send information of dangers, changes in aids to navigation, notices of new shoals or channels, errors in publications, or any other facts affecting the navigation of Canadian waters to the Chief Engineer, Department of Marine and Fisheries, Ottawa, Canada.

BREAKAGE of propeller shafts at sea costs an immense sum annually in salvage. Mr. Justice Barnes, of the British Admiralty Court, said recently that during the past two years the amount awarded by that court for salvage of steamers thus crippled was £135,406, while the total awarded in other cases of salvage amounted to only £95,630.

NOTES.

ON our light-house service we spend something like $6,000,000 a year. Notwithstanding the importance of this noble work, Congress each year hacks away at the appropriation to keep it down to its lowest limit. Congress says that light keepers, on whose efficiency and courage hundreds and thousands of lives depend each year, shall be paid $600 for a year's service. That is fully as much as many a street sweeper or school teacher in New York receives. The wonder seems, at that pay, that our coasts are as well guarded as they are.

A CAPTAIN of an ocean liner, discussing the question of order and discipline on board a big ship—or a small floating township—expressed the opinion that all shipmasters having under their charge over a certain number of people, passengers and crew, should be constituted magistrates, and be empowered to deal with all cases that come under their notice calling for treatment on the voyage. There need be no more fear of miscarriage of justice as meted out by intelligent mariners—assisted, if thought proper, by twelve picked men to act as a jury—than there is with the great body of unpaid justices who attend the courts of justice throughout the land day by day.

THE automobile industry has received a great blow in the instructions issued by Supervising Inspector General Dumont declaring that automobiles operated by gas or other engines cannot be carried on freight or passenger steamships unless the Revised Statutes of the United States can be amended. No ferryboat or other steamship can be permitted to transport any automobile operated by gas, naphtha or benzine. This would shut out not merely the pleasure vehicles, but also all mail wagons, trucks or delivery wagons with gasoline tanks. As no mention is made of electric automobiles it is to be presumed that they are not prohibited. Inasmuch as there is no instance on record of an automobile tank having exploded, an amendment of the regulation would seem to be in order, especially as it was drawn up when the automobile was unknown and was not intended with any special reference to their exclusion. The compact and well protected gas engine of the automobile can hardly be considered a dangerous article of freight.—Journal of Commerce, Baltimore, Md.

IT has already been announced that the heirs of Mr. Anthony Pollok, who lost his life by the foundering of the French steamer, La Bourgogne, offered a prize of 100,000 francs for the most effectual apparatus for saving life on the high seas, and the task of awarding the prize was, by the maritime section of the Paris Universal Exhibition, entrusted to an international jury. This jury appointed a commission of experts to report on the different kinds of apparatus submitted by competitors. This commission has now ended its labors, and recommends that the international jury should not award the prize in its entirety at present. It is therefore probable that the competition will be kept open for two or three years longer, under conditions which will be published later on. In the meantime the implements and apparatus submitted by the competitors are placed altogether on the terrace of the Palais de la Navigation de Commerce fronting the Seine. The collection is said to be well worthy of inspection, embodying as it does many new and original and really valuable ideas.

M. FOREST, a well-known French naval constructor, familiar with submarine boats and an enthusiastic admirer of them, has joined M. Noalhat a civil engineer, in the publication of a work on submarine boats. Their history is traced to an apparatus described by Aristotle, as employed at the siege of Tyre. Cornelious Van Drebble, a Dutch physician, 1620; Merseune, 1634, and Simons, 1747, are given preference over Bushnell, whose design for a submarine boat dates from 1773. Fulton's Nautilis and the submarine suggestions of the Frenchmen, Marquis de la Feuillade, Dr. Payerne, Philip, an American, Bauer, a German, and James Nasmyth are also included in the early history of subaquatic warfare, and Admiral Aube is given a prominent place. M. Forest contends that submarine vessels have now reached the stage of successful experiment, and must be reckoned with hereafter in the calculation of naval strength. He believes that the Narval will prove a complete success, and that the type of vessel she represents will impose peace upon the world. Ericsson also reached the conclusion before he died that submarine attack in some form would bring low the pride of great navies and equalize the conditions of naval warfare, by giving the weaker nations a powerful means of defence within their possibilities. Battleships, Ericsson was accustomed to speak of as "torpedo food."

STOCKHOLDERS' RIGHT TO INFORMATION.

Some managers of corporations argue that it is impossible for the Board of Directors to present a clear and complete report of a corporation's condition and operations to its stockholders without doing injury to the interests of the latter. The Cordage Trade Journal, New York, very pertinently rules upon the situation as follows: Organizers of companies, who expect to invite the investment of capital by the general public in their shares, frequently incorporate under the laws of states that exact the least possible measure of responsibility from directors, and require little or no information regarding the company's affairs to be furnished to shareholders. Whether they do this because they sincerely believe the claim stated at the beginning of this paragraph, or because their own actions and the results of the companies' operations will not bear scrutiny, each reader may decide for himself.

If anyone really believes that the interests of the stockholder who is not an officer or director of the corporation are best safeguarded by a policy that imposes on him complete ignorance of his company's business and condition, he may learn something to his own advantage by reconsidering the subject, for an impartial investigation seems to show that the most prosperous and substantial companies—those whose shares command a high market value—are corporations which allow their shareholders to know what their corporations are doing. Surely it is an advantage to an officer or director of a corporation that its shares have an assured value in the market.

Apart from the mere expediency of informing shareholders—yea, even the holder of five shares—of a corporation's condition and operations is the fact that each shareholder is entitled, by common right, to know just what his company has done. This fact is often overlooked by managers of corporations, who apparently think that the principle is right when asserted by the holder of 51% of a corporation's capital shares, but wrong when stated by a holder of only 49 per cent. Nevertheless, it is right in both cases.

This is, perhaps, more easily understood when one considers just what is a corporation. In the last analysis, a corporation is simply a large firm, and differs from a co-partnership only because it enjoys certain rights and immunities not possessed by, and is subject to certain obligations not laid on, private firms. In a co-partnership composed of four persons, one of whom has, perhaps, contributed only 10 per cent. of the capital, no question arises as to the right of each member of the firm to know exactly what the concern is doing and how it stands. These partners are responsible to each other and the firm's creditors. In corporations, the fact that the members of a corporation have limited their responsibility to the corporation's creditors does not lessen their responsibility to each other. Nor does the fact that the Board of Directors and the officers, clothed with executive power, are, not only in theory but quite frequently in practice—although exceptions exist—responsible to each other lessen their real responsibility to their fellow shareholders. Some Boards of Directors believe otherwise, but courts of law have shown that shareholders have some rights which directors must respect.

Stockholders may allow their rights to lie dormant for a while, as did the shareholders in a southern land company, until it failed, when they instituted an action to learn whether the directors had made illegally money in selling land to the defunct corporation, and, the suit proving conclusively that the directors—including some of the shrewd men of a large northern city—had sold land to their own company at an enormous advance over its probable value, recovered judgment against the directors for a large sum, which included interest and costs. It is apparent from the language of the court in the case referred to that corporation promoters and managers consult their own interests when they voluntarily conduct their operations and their companies in accordance with the rights of each individual shareholder, whether large or small.

Doubtless an era of large mercantile and manufacturing corporations conducted with scant regard of the rights of stockholders was inevitable before directors and others could be made to understand that shareholders (not on the inside) are not what they too often appear to be—helpless geese to be plucked. It is extremely gratifying to observe a tendency among some Boards of Directors to increase the amount of information vouchsafed to shareholders. One of the so-called steel group of industrial companies, which has a capital stock of $80,000,000, last week issued its first annual report, and it is found to present a large amount of information concerning the company's business operations and its financial condition. Details are frankly presented which some corporation managers say cannot be safely revealed if the stockholders' interests are to be consulted. Yet, it is difficult to see how the shareholders have suffered, for the report, if correct—as it appears to be—shows just what the present condition of the company is, and enables any shareholder desiring to sell his holdings to show to prospective purchasers just what he has to sell. In the absence of complete reports, shareholders of corporations have certificates of stocks to sell that are little more valuable for marketing than are lottery tickets, it being as difficult to judge of the probable value of one as the other.

If the large mercantile and manufacturing corporations whose shares are listed on the stock exchanges of this country are to attract investments from the public like shares of railroads, banks, trust companies and other corporations, it will be necessary for their managers to regard their shareholders as joint partners who are entitled to know whether the companies have made or lost money and what is the real value of their property. When the pockets of the people are overflowing with small change, they will gamble with their surplus funds, and corporations, which make inadequate reports to their shareholders, gain shareholders in such times. Such times are succeeded by less favorable conditions, and companies about which little or nothing is known are the first to suffer. Frequently silence has magnified distrust, and those companies which establish respect for themselves by keeping their shareholders posted about their operations will, in the long run, prove most successful and enduring.

WATER TUBE BOILERS.

Concerning the explanation of Mr. Goschen anent the Belleville boiler, the Army and Navy Gazette, London, says: The gist of it is that while we have been obliged, like every other naval power, to adopt the water-tube system for our warships, because of its advantages from a military and strategical point of view, yet it is by no means certain that we have chosen the best, or nearly the best, type of water tube boiler, and in any case the system, being as it were in an infantile stage, is subject to a number of infantile complaints which, while worrying to its parents and those placed in authority over it, by no means preclude its attaining a healthy and vigorous manhood. Of the very many types of water-tube boiler, all may be gathered into one or two categories: the large tube types and the small tube types. So far as the latter are concerned, they have been tried in small craft, and have given satisfactory results. So much so, indeed, that they are placed outside the region of controversy. One type may be, and is, no doubt, better than another, but the results obtained are not likely to result in our relying entirely upon one type at present.

With the large tube boilers the case is entirely different. The naval authorities, when they adopted, or perhaps as we ought to say, when they were forced to adopt, the system for large ships, were practically reduced to Hobson's choice. They had to take the Belleville boiler or none. They have improved upon it as originally designed, and they are still introducing improvements. But meanwhile other systems have come into existence, and it is admittedly a question whether it would not be better now to try a new type. It may indeed be the case that a type at present fitted with small tubes could be utilized for large vessels if the tubes were slightly increased in diameter. It has been suggested that this might be done with the Yarrow type, which has given uniformly good results, and is, perhaps, at the present moment the most generally approved of all the types in existence. In these circumstances it is not surprising that the first Lord of the Admiralty should be found prepared to submit the whole question to a committee or a commission.

But the question thus to be submitted must be strictly limited to a decision as to which is the best water-tube boiler, and not, as some of the Admiralty critics would prefer, as to whether we should go back to the altogether discredited Scotch boiler, beloved by Mr. William Allan.

THE daily press reports that the new steamer, the Deutchland, was delayed during a recent trip because "the piston of her starboard engine became overheated," so that "she was obliged to slow that engine for a day and a night." Hot pistons are quite common in steam engines, and in fact if one were to run cold the engine would hardly need to be "slowed"; she would attain to that herself.—American Machinist.

SHIPPING AND MARINE JUDICIAL DECISIONS.

(COLLABORATED SPECIALLY FOR THE MARINE RECORD.)

Maritime Lien.—One is not entitled to a lien on a vessel for repairs, where the work is done on a contract with and on the credit of the owner, and not under a contract, express or implied, for a lien. Moore vs. Lincoln Park & Steamboat Consolidated Co., 46 At. Rep. (Pa.) 857.

Fault—Vessels Crossing.—A tug with a tow sighted a schooner approaching on a crossing course, when the vessels were 200 yards apart, but took no steps to avoid a collision, except to give danger signals to the schooner, which kept her course and came in collision with the tug. Held, that the tug was in fault for the collision, it not being shown that she could not have kept out of the way if she had made proper effort to do so. The Mary A. Bird, 102 Fed. Rep. (U. S.) 648.

Collision—Steam and Sailing Vessels—Duty of Tug with Tow.—The fact that a steam vessel is incumbered with a tow does not relieve her from the duty imposed by the navigation rules of keeping out of the way of a sailing vessel, but rather requires additional care upon her part; and so strict is the rule that she can only escape liability for a collision by showing that it was inevitable, or caused by the culpable negligence of the sailing vessel. The Mary A. Bird, 102 Fed. Rep. (U. S.) 648.

Collision—Steamer and Sailing Vessel—Failure to Exhibit Flare-up Light.—The navigation rules do not make it obligatory on a vessel to use a flare-up light unless the circumstances are such that prudence would require it; and a schooner cannot be held in fault for a collision with a steamer in the night, because of her failure to exhibit such light, where her other lights were burning brightly, and no necessity appeared therefor until after the time she was discovered by the steamer. The Excelsior, 102 Fed. Rep. (U. S.) 652.

Registration of Vessel.—Under Rev. St. U. S. § 4141, providing that every vessel shall be registered by the collector of that district which includes the port in which the vessel belongs, which port shall be deemed to be the nearest to which the owner usually resides; and section 4312, providing that, to entitle a vessel to enrollment, the same requirements shall be complied with as are required before registering a vessel; and section 4192, providing that no mortgage of a vessel shall be valid against another than the mortgagor unless it is recorded in the office of the collector where the vessel is registered or enrolled—a corporation of one state, which owns a vessel with which it does business in another state, where it has an office, may there enroll it. Being enrolled there, a mortgage on it recorded where it is enrolled is valid. Moore vs Lincoln Park & Steamboat Consolidated Co., 46 At. Rep. 857.

Violation of Rules by Steamer—Attempting to Cross Ahead of Schooner.—On a dark but clear night a collision occurred between a steamship and a schooner, which approached each other on nearly parallel courses. The schooner saw the lights of the steamer when five or six miles distant, and from that time until very shortly before the collision her red light was visible bearing about a point and a half on the schooner's port bow. The schooner's lights were burning, and, according to a preponderance of the evidence, were in good condition and not obscured, and her red light was seen and announced by the lookout on the steamer; and the first officer, on looking, made out the sails of the schooner nearly ahead, and about 1,800 feet distant. He at once ordered the helm hard a-starboard, and continued at full speed, and the collision followed a minute later. The schooner held her course. Held, that she was not in fault for failing to exhibit a flare-up light, but the collision was due to the fault of the steamer in failing to sooner discover the schooner, and, on discovering her, in attempting to cross her course in direct violation of navigation rule 22. The Excelsior, 102 Fed. Rep. (U. S.) 652.

EASTERN FREIGHTS.

Messrs. Funch, Edye & Co., New York, report the condition of the Eastern freight market as follow: The principal item of interest may be found in the increased number of steamers closed for coal at very full rates, mainly for the Mediterranean, but in other directions as well. Grain tonnage continues in light request and charters reported show a decline from previous top figures. The demand for deal and timber boats continues active at hardening rates, as do fixtures for combination cargoes from the gulf, whilst charterers from the South Atlantic cotton ports so far have shown little desire to take tonnage on owners' rates. Time charters continue being effected at very high figures for special trades, requiring extra tonnage, whilst for the trans-Atlantic business, unless as timber carriers, steamers can only be placed at a heavy loss to charterers.

As regards sail tonnage we have nothing to add to our remarks of last week, the position of the market remaining entirely unchanged.

THE pile raft owned by the Robertson Raft Company arrived last week in San Francisco from the Columbia river in tow of the tugs Rescue and Tatoosh. According to the report of the tugboat men 4,000 of the logs broke adrift off the Columbia river and are now floating about, a menace to navigation if they have not been washed ashore.

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C. E. RUSKIN, - - - - Manager.
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CLEVELAND, O., AUGUST 23, 1900.

THE publisher of the Waterways Journal, St. Louis, Mo., asked the Assistant Secretary of the Treasury, F. A Vanderlip, for leave to copy certain evidence given in a case tried in the St. Louis district before the local board of steamboat inspectors, presumably for publication in his journal. The Assistant Secretary now begs off by saying that the rooms where the investigations are held are too small to admit newspaper reporters and that therefore a star-chamber course is imperative. We feel like saying that Vanderlip ought to go and take a swift jump at, on, or to himself. Let this assumptive Assistant Secretary of the Treasury peruse the following:

"Local inspectors of steam vessels may furnish the public press certain information.

TREASURY DEP'T., STEAMBOAT INSPECTION SERVICE,
OFFICE OF THE SUPERVISING INSPECTOR GENERAL,
WASHINGTON, D. C., May 22, 1897.

GEO. H. STARBUCK, ESQ., Supervising Inspector, Second Dictrict, New York, N. Y.

Sir: Complaint having been made by persons connected with the public press that the regulations referred to in Department Circular No. 143, dated September 27, 1893, amending Rule 12 of Department Regulations of December 30, 1892, in relation to giving out information, are unnecessarily rigorously observed by the local inspectors in the second supervising inspection district, I would advise you to instruct the officers referred to that, as there are many matters of public interest coming before them that can be and should be communicated to the public through the representatives of the press, they are hereby authorized to give such information freely, in accordance with their best judgment, as to carry out the true spirit and intention of the regulations referred to herein.

Reports of all accidents and collisions received by inspectors particularly should be freely given to agents of the press upon application.

Respectfully yours,
JAS. A. DUMONT,
Supervising Inspector-General.

Approved, L. J. GAGE, Secretary.

The RECORD has just taken the same dose from "the old fraud on the Potomac," and can't even learn the names of officers licensed during the current year, or any other information which ought to be given due publicity. Star-chamber sessions is an easy let-down for the workings of the steamboat inspection service, rather are they dictatorial, absolute and assinine. Dumont has evidently impregnated or inoculated Vanderlip in this ruling, as he generally does all others.

THE width of a flash of lightning has been measured by Mr. George Rumker of the Hamburg observatory. A photograph was secured last August as lightning struck a tower a third of a mile away, and from the distance of the tower and the focal distance of the camera objective it was possible to calculate the breadth of the discharge shown in the picture. It has been determined that the flash was one-fifth of an inch wide. Ramifications shown in the photograph on each side of the main discharge are attributed to the strong gale that was blowing, the phenomenon appearing like a silk ribbon with shreds floating in the wind.

MASTER, QUARTERMASTER'S DEPARTMENT AT LARGE.

The United States Civil Service Commission announces that it is desired to establish an eligible register for the position of master in the Quartermaster's Department at Large.

No scholastic test will be given, but applicants will be graded upon the elements of age, experience, intelligence, character as a workman, and physical qualifications, as shown by the information furnished in connection with their formal applications. It will not be necessary for applicants to appear at any place for examination.

From the eligibles resulting from this examination certification will be made to the position of master on the Quartermaster's steamer, General Ayres, at Boston, Mass., at a salary of $110 per month.

This examination is open to all citizens of the United States who comply with the requirements and desire to enter the service. All such persons are invited to apply, and applicants will be graded and certified with entire impartiality, and wholly without regard to any consideration save the grade given them.

Persons who desire to compete should at once apply to the secretary of the local board of examiners at Boston, Mass., or to the United States Civil Service Commission, Washington, D. C., for application form 1093, which should be properly executed and filed with the Commission prior to the hour of closing business on October 1.

IRON ORE PRODUCTION.

The production of iron ore in the United States for the year 1899, according to the annual report of the United States Geographical Survey, which has just been compiled by Mr. John Birkinbine, amounted to 24,683,173 long tons, an increase of 5,249,997 tons, or 27 per cent. over 1898. The records for 1898 and 1899 represent the largest output of iron mined in any one country in one year, the nearest approach being a total of 18,062,040 tons mined in 1880 in England. Twenty-four states contributed to this total, Michigan leading with 9,146,157 tons, and Minnesota taking second place with 8,161,289 tons. Alabama occupied third place with 1,009,327 tons.

The Lake Superior region increased its former maximum output of 13,779,308 tons in 1898 to 17,802,955 tons in 1899. The amounts mined from the several ranges during the latter year were as follows: Marquette, 3,634,596; Menominee, 3,281,421; Gogebic, 2,725,648; Vermillion, 1,643,984; Mesaba, 6,517,305 tons. With the exception of Gogebic all of the ranges mined their maximum product in 1899.

The total value at the mines of the iron ore produced, as reported by producers, was $34,999,077, or $1.42 per long ton, an increase of 28 cents, or 24.6 per cent. over the average valve of $1.14 per ton, as given in 1898. The highest average value placed on iron ore at the mines is for the State of New Jersey, where the expense of mining is considerable. The lowest average cost, 90 cents per ton, was in Texas, where a portion of the iron ore is obtained by covict labor.

OWNERS' LIABILITY.

The following query and answer appeared in the New York Journal of Commerce: "I shipped a lot of goods on board a vessel for a foreign port. The vessel was stranded and is a total wreck, but part of the cargo has been saved. Have I any redress or claims against the company?"—Subscriber. Reply.—It is very likely that the vessel owners in this case are exempt from liability by Section 3 of what is known as the "Harter Act" (Act of Feb. 13, 1893), but if they are not protected by the provisions of this section nor by the rules of the common law, they can be held. Section 3 of the "Harter Act" is as follows: "That if the owner of any vessel transporting merchandise or property to or from any port in the United States of America shall exercise due diligence to make the said vessel in all respects seaworthy and properly manned, equipped and supplied, neither the vessel, her owner or owners, agent or charterers shall become or be held responsible for damage or loss resulting from faults or errors in navigation or in the management of said vessel, nor shall the vessel, her owner or owners, charterers, agent or master be held liable for loses arising from dangers of the sea or other navigable waters, acts of God, or public enemies, or the inherent defect, quality or vice of the thing carried, or from insufficiency of package, or seizure under legal process, or from loss resulting from any act or omission of the shipper or owner of the cargo, his agent or representative, or from saving or attempting to save life or property at sea, or from any deviation in rendering such service."

LAKE LEVEL DISTURBED.

A tidal wave swept Lake Michigan yesterday, and vesselmen and longshoremen who were near the mouth of the Milwaukee river on Monday afternoon report one of the strangest phenomenons ever chronicled in marine annals.

The Milwaukee Daily News reports that the water in the river suddenly receded about two feet. The same phenomenon was observed along the lake shore and in the harbors. At the life-saving station the fall was noticed, and later the water suddenly rose again to a point twelve inches above the high-water mark.

The mysterious rise and fall of the water in the lake and the rivers is attributed to a tidal wave which is known to have swept the west shore yesterday, reaching as far south as Chicago. Persons standing on the shore of the lake when the phenomenon occurred report that when the wave returned it came in a solid wall of water, and bathers and others in its path were compelled to fly for their lives before the onrushing water. Fishes and shell fish were washed high up on the lake shore. Row boats were carried away from their moorings and washed high up on the beach.

When the wave returned the current of the rivers in this vicinity was reversed and the water in the Milwaukee river began to flow up stream.

There are various explanations for the phenomenon put forward by vessel captains and marine men. Some are inclined to believe that the cause of the tidal wave was a subterranean disturbance, or volcanic eruption at the bottom of the lake. At the Weather Bureau the cause of the phenomenon is attributed to squals on the lake. There were severe storms at some points where the water was greatly disturbed. Others believe that the change in air pressure was the cause of the rise and fall, and it was a direct result of the sudden change in temperature.

At St. Joseph it is reported by Capt. Stewart, of the City of Milwaukee, that the lake rose and fell eighteen inches. At Muskegon the wave was noticed at about 6:30 o'clock, and it is reported that at points along the shore the tide went out fifty feet.

MORE SHIPBUILDING CONTRACTS PLACED.

Two contracts were closed at Cleveland this week. One order, which was placed by Mr. D. R. Hanna, son of Senator M. A. Hanna, is for two steamers and two consorts to carry 4,000 tons each. The steamers will be 314 feet keel, 42 feet beam and 26 feet deep. They will have triple expansion engines and steam will be furnished by Scotch type boilers. The schooners will be 300 feet long. Most of the people interested with Mr. Hanna are local parties, and a company will be organized to operate the vessels, which will come out at the opening of navigation next season. Names for the new boats have already been selected, and they will be named for officials of the Calumet & Hecla Mining Co. and the Republic Iron & Steel Co. The steamers will be T. L. Livermore and R. A. Warner, and the schooners George A. Flagg and A. W. Thompson. The Livermore will tow the Flagg, and they will represent the Calumet & Hecla Co., and the Warner and Thompson, named for the Republic officials, will be a tow.

Mr. J. C. Gilchrist has also added another steamer to his order for 5,000-ton steamers which was placed early last week, and six steamers will be built for Mr. Gilchrist by the American Ship Building Co. during the winter instead of five. The Gilchrist steamers will be 366 feet over all, 346 feet keel, 48 feet beam, and 28 feet depth of hold. Four of the Gilchrist steamers will be built at Lorain and the keels for the other two will be put down at Detroit, where the steamer ordered by David Whitney of that city will be built. The two big steamers for Capt. John Mitchell will be turned out at the Cleveland yard. The South Chicago yard is full with the four steamers for the coast, which were ordered by Counselman, the big Chicago grain shipper, early in the week. The two Hanna steamers will be built at the Bay City plant and the schooners will probably be built at the West Superior yard. The American Ship Building Co. now has seventeen new vessels under contract orders for which were closed during the past few weeks. There will not be much chance for any of the big steamship companies such as the Bessemer, Pittsburg and Minnesota, to add to their fleets this winter as only a few berths are left at the lake yards and they are practically tied up and will probably be taken during the next few days. The ten vessels ordered by local parties since the early part of last week will cost close to $2,000,000.

LAKE SUPERIOR POWER COMPANY.

The industrial enterprises at Sault Ste. Marie furnish an acknowledged indication of the era of marvelous development upon which Canada is entering. The public throughout the Dominion are kept pretty accurately informed with regard to these enterprises; but an article which appears in The New York Sun of Sunday, presents their progress up to date wtth striking force.

To the writer of this article, Mr. Clergue has said: "In five years we will be running through fish trains from Hudson Bay to Chicago," and the correspondent adds: "In five years, too, the company will have absorbed all the outflow of Lake Superior, except what is needed for vessels."

Let us grasp what is meant by these two statements, which were not comprehended in the sketch of his opportunities and plans laid before the Toronto Board of Trade some months ago, by Mr. Clergue. The Toronto World says that: In five years Mr. Clergue proposes to complete the extension of his North Shore Railway to Hudson Bay. In order to reap all the advantages of the Dominion Government grants to this extension, there are now employed 150 expert timber cruisers, mineralogists and geologists, who, as The Sun informs us, "are traversing that whole region, each party being accompanied by Indian guides and canoemen. These men are selecting timber lands, running out the geological formations and verifying and correcting old surveys; and the grants (1,250,000 acres) will be selected under their reports." The lands of these grants are not to be selected in one bunch, but within a reasonable distance of the lines of the road, in small blocks.

The plan of water power development at the Sault throws the railway scheme almost into the shade. Here are quotations from the Sun's article: "As the basis of the entire work, all the water power of Lake Superior at this point has been acquired, and before the establishments are fully completed the rapids of Sault Ste. Marie will be dry and all the vast flow of the lake will be at work, either turning wheels or passing ships through the canals and locks of the Sault. It takes one one-thousandth part of the water of Lake Superior to operate the ship locks, says Mr. Clergue, and why should not the rest be utilized in employing many thousand industries, which, but for cheap water power, could not be carried on, and in turning to account natural advantages and materials that but for cheap labor would be wasted?"

"This fall work will be begun to remedy the difficulty that must come very soon in the permanent lowering of the waters of Lake Superior. It is an international question, and neither the Canadian nor the American government will permit any change in these waters. So a dam will be built at once clear across the head of the rapids. The dam will be 2,000 feet long, and will be a series of stone and concrete piers, connected by steel gates, to be opened or shut as occasion requires. It is not improbable that the company may raise instead of lower the level of Lake Superior. Every foot of raise in the level will mean much to it."

Some particulars are given of the further developments, either under way or in prospect, by the Clergue syndicate, which controls $20,000,000 of Philadelphia and New York capital, which has spent so far $4,500,000, and has plans that will call for the expenditure of $15,000,000 or more additional. In one mail the other day the pulp mill got an order from the center of the American paper making region at Menominee, Wis., and others from Nagasaki, Japan, and France. The field of shipment is, in fact, only limited by the demands of the paper trade. The plans for the ferro-nickel works, which are now under construction, propose 100 furnaces, of five tons daily capacity each. The company has closed a contract with the Krupp firm of Germany, under which a large amount of nickel steel will be manufactured at the Sault and shipped to Germany for a period of five years. Mr. Clergue states positively that the contract is closed, and will be carried out. The company has now in operation one canal, giving 20,000 horse-power. Another, to give 50,000 horse-power, is almost completed, on the Michigan side of the river. Of the total power of the latter, 40,000 horse-power has been leased for a long term of years to the Union Carbide Co. and the United Alkali Co. The former is now using a great power at Niagara for the manufacture of carbide of calcium. The Sault power will cost it, perhaps, a third of what it pays at Niagara. Two weeks ago work was begun on the Canadian side of the river on a canal that is to develop 40,000 horse-power more. It is estimated that this will take all the power of the river. The canal and power house on the American side will cost $2,750,000. The second Canadian canal will cost nearly as much. Last year the company bought in England four steel ore ships, which, when navigation closes, will be sent to the sea, carrying cargoes of pulp for wherever the company has orders. In the spring they will return again to the upper lakes. Next year the company will have four more of these ships, now building in England, and the eight will find steady employment in the ore carrying on the lakes.

There are, in fact, more great industrial ideas comprised in the Sault enterprises than in any other development on the globe; and the World believes that what has been accomplished is but a promise of the greatness which the future holds in store for this great country of ours.

A NEW ARRIVAL.

Our Toronto correspondent advises us that the new steambarge Strathcona, built at Dundee, Scotland, by the Caledonian Ship Building and Engineering Co., Limited, for the Hamilton and Fort William Navigation Co., arrived at Toronto on Saturday night last. The Strathcona made the trip across from Newcastle in 17 days, in command of Capt. Erikson, of Newcastle. Arriving at Montreal, the Strathcona was taken charge of by Capt. John A. Irving, of Hamilton, who will command her. When she made her appearance in Toronto she was greeted with whistles from all the boats which were then in port.

The Strathcona is built entirely of steel and is fitted up with all the latest devices. She is 255 feet long, and has a capacity of 3,000 tons. The officers' quarters are furnished in an elegant manner, as are also the rooms occupied by the other members of the crew. She brought into Toronto a cargo of scoria blocks from Newcastle. She will be engaged in carrying grain, rails and ore between Lake Superior points and Fort William.

The Doncona, a sister boat to the Strathcona, is expected to arrive at Montreal from Newcastle in about three weeks.

Capt. Irving for five years was in the employ of the Hamilton Steamboat Co., and commanded at different times the Macassa and Modjeska. He also sailed the Bannockburn of the Matthews fleet. Capt. Erikson will leave the city at once on his way home to Newcastle, and will bring out the next boat for the company. It is to be regretted that Capt. Erikson had some trouble with his British crew regarding wages, etc., but the affair was promptly settled.

LETTERS AT DETROIT MARINE POST OFFICE.

August 25, 1900.

To get any of these letters, addressees or their authorized agents will apply at the general delivery window or write to the postmaster at Detroit, calling for "advertised" matter, giving the date of this list and paying one cent.

Advertised matter is previously held one week awaiting delivery. It is held two weeks before it goes to the Dead Letter Office at Washington, D. C.

Beebe, James A., Hurlbut
Brook, Milton
Benton, E. C.
Brown, Mrs. G.
Bayly, George
Barnhart, Frank E.
Bennett, Neil P.
Best, H.
Church, Joseph, Drake
Carl, Frank, Hill (Wood)
Coswell, Brose
Cronk, E. W., Luke Ramson
Carney, John, W. H. Sawyer
DuFrain, Wm., Quito
Davis, J. H.
DeBoux, Harry, Frontenac
DeLong, Mrs. R.
DeLair, Edward Chas., Bangor
Dunn, John J.
Dobson, J. E.
Ellery, W. H., Saginaw
Fox, William, Ward
Flack, I. M., 2, Ogemaw
French, L. C., Schoolcraft
Gilchrist, Wm. B., 2, Vega
Green, Mrs. W. H., Gettysburg
Gaylor, W. J., Flowers
Gorrow, Fred
Gaines, Mrs. A.
Gosiere, Eugene W.
Gillespie. Chris C.
Hayward, George
Henkel, Paul, Cambria
Harris, Chas., Bessemer
Kelly, Hugh, M. M. Drake
Lowden, William, Macy
Lynch, Mrs. Owens
Lowry, Robert, Doty
Little, Wm., America
Lampson, Archie, Spokane
Ludwick, Jos. H., Jennie
Morris, Clyde, Sawyer
Mason, Robert, Harvard
Masher, Thomas
Miley, Miss May
Mark, John W.
McComb, Jas., Neosho
McGuire, Helen
McAndrew, John H.
McAulay, H. A,
McReynolds, Patrick
Noble, Andrew, Waldo
Patterson, A. E., Hackett
Pollack, Capt. Geo. H., D. P. Rhodes
Russell, O., Eureka
Stover, James, 2
Somers, C. D., Macy
Smith, F. J.
Smith, C. C.
Tobo, Alfred, Hurlbut
Thurston, Wm., St. Paul (Wood)
Williams, Jake, LaSalle
Woodruff, Isaac D., G. Stephenson
Wilson, G. M.
Willix, L. O.
Young, John H., Jr.

VESSELS CLASSED.

Vessels classed and rated by the American Bureau of Shipping in the Record of American and Foreign Shipping: Screw Excelsior, ship Isaac Reed, schooner Maud Palmer, ship St. Paul, schooner William C. Carnegie and three-masted schooner Sanandreas.

DETROIT.

Special Correspondence to the Marine Record.

Capt. McKay, of the steamer City of Detroit, reported on Monday that the Southeast shoal gas buoy below Pelee has been swept away. The absence of the light is not especially dangerous to light draft boats, but might make trouble for a heavy loaded freighter.

The steamer Inter-Ocean, bound down, was seized by United States Marshal Lomasney at Port Huron on Tuesday, on a writ issued by the St. Clair Steamship Co., owners of the schooner Fontana. It is claimed that the Inter-Ocean passed the schooner Santiago in the rapids above Port Huron, causing that vessel to sheer into the Fontana and sinking her. The Inter-Ocean will be appraised, bonded and released, pending a suit to locate the blame for the loss of the Fontana. The Fontana was in tow of the steamer Kaliyuga at the time of the collision.

Harry Penton, who for many years was identified with the shipbuilding business in Detroit, is in the city for a brief visit. Mr. Penton has been engineer draughtsman for the Chicago Ship Building Co. for a number of years and has made a record as a progressive manager and shipbuilder. Mr. Penton returns to Chicago this week and will assume charge of the Fraser & Chalmers engine plant, one of the largest machinery building plants in the west. We all liked Mr. Penton while he was here and only wish that he could have taken up a lucrative position in Detroit and stayed on his old hunting ground.

Capt. Harris W. Baker is steadily employed on the Richards. The pig iron cargo is practically all out and the aid of floats will be required to raise the hull. It is expected that the body of Sailor John Kelly will come up in the tangled wreckage when the boat floats. On the Sage no signs of an immediate floating are to be seen. The McMoran Wrecking Co. is engaged at the task with $5,000 to gain when the hull is towed to dry dock. Nothing has been or is likely to be done to the Fontana. The current is so swift that it is doubtful if a diver could get down and keep his footing even long enough to bore holes in the hull and insert dynamite.

A press dispatch from Bay City, Mich., states that the Eddy Bros. & Co.'s immense lumber mills at that place are to be dismantled and the plant removed to Canada. The concern owns large tracts of pine timber in Canada, and have kept their mill in Bay City partially supplied with logs towed across the lake. The embargo placed on logs by the Canadian government, prohibiting them being towed to the United States, has effectually closed the mills, and its owners have been forced to engage in the manufacture of lumber in Canadian territory in order to utilize their timber holdings. Work on the construction of the new mill at Blind river, Georgian Bay, has been begun.

Nobody was better known to the Detroit vessel interests of the later sixties, seventies and early eighties than was John R. Gillett, who died at his home, No. 245 Weedbridge street, east, last week. He was born September 24, 1831, and from that time, nearly sixty-nine years, he had been a continuous resident of this city. In the sixties he was a bookkeeper for Norton Strong, the well-known tug owner, who has long since passed to his rest, and subsequently was made manager for his large fleet of tugs, which included the powerful towers Champion, Sweepstakes, Satellite, Stranger and I. U. Masters. After the death of Mr. Strong Mr. Gillet continued to manage the fleet until the estate was finally divided under the direction of Thomas Pitts, in the early '80's. For eight or ten years after that he acted as bookkeeper for the Inman tug line of Duluth, spending his winters with his family in this city, and in the last few years he had been employed in similar capacity with E. W. Bissell & Co. and Jacob Beck & Sons.

The steamer Specular, bound down, collided with the steamer Denver, bound up, off Colchester light early on Wednesday morning. The Specular went down in a few minutes after the crash. All but five of her crew succeded in getting into the lifeboat and were picked up by the steamer Maritana. After the collision the Denver proceeded on her way and the crew of the Specular did not know what boat had hit them. The balance of the crew clung to the rigging, which was above the water, and were there discovered by the Maritana. The Denver was not damaged to any extent, and on arriving at Port Huron, her captain reported his share in the disaster. He refused, however, to make any statement in regard to the collision. The Specular had dropped her consort, Magnetic, which was going to Toledo to unload, and was on her way to Cleveland when the collision occurred. The lost boat was owned by the Republic Iron Co. and was valued at about $60,000. She was built In 1882 and carried about 3,000 tons.

AN improved steamboat wheel is on exhibition at the Monongahela wharf, and it promises to revolutionize the mode of steamboating on western and southern rivers, says the Pittsburg Cronicle-Telegraph. Unlike other steamboat wheels, the wheel does not produce swells, and when backing does not "wash" the river. The invention is known as the Mederer improved steamboat wheel. The wheel has curved buckets supported on each arm, one for going ahead and one for backing. The curved buckets simply lift the water and drop it without making any waves. The owners claim that the speed of a boat can be increased by the adoption of this kind of a wheel. Several representatives of the transportation department of the river combination inspected the wheel, and were so pleased with it that the towboat Leader of Monterey will be fitted up with a wheel in order to give it a trial.

Truscott

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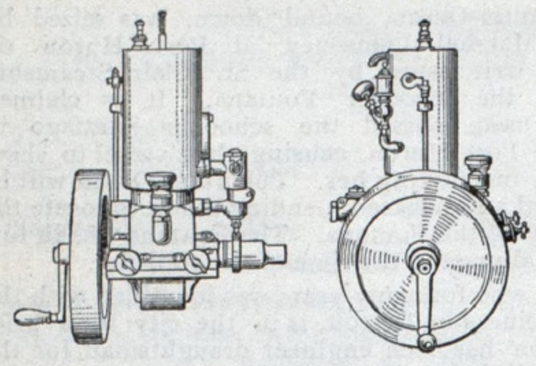
HIGH GRADE PLEASURE CRAFT.



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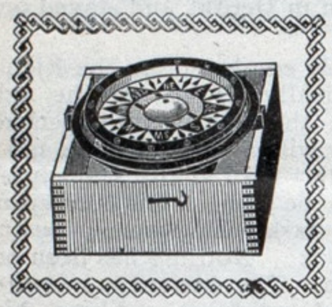

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TREASURY DECISIONS RELATING TO THE U. S. MERCANTILE MARINE.

Relative to furnishing copies of records of office of steamboat inspectors.

TREASURY DEPARTMENT,
STEAMBOAT INSPECTION SERVICE,
WASHINOTON, D. C., August 11, 1900.

SIR: The department is in receipt of your letter of the 7th, instant, in which you complain that in investigations held by the local board of steamboat inspectors in the St. Louis district, "that evidence of investigations of violations of marine law are withheld from the public, and that newspaper representatives are prohibited from entering the office during such investigations, and that it is also prohibited for officers of the inspection service to permit the copying of any or all of such evidence," and you further say that "the entire proceedings are of a star-chamber nature," and you ask, "is this a fact?" and, if so, "please send me (you) authority."

You further state that you have been requested by "a number of owners and pilots to furnish the important parts of the evidence" in the case of T. B. Sims vs. Pilots Trimble Wadlington and Joseph A. Gibbons "together with the decision of the local inspectors."

In reply you are informed that it is assumed by this department that the inspectors in refusing you access to their records have been governed by the department regulations contained in Treasury circular No. 148, dated September 27, 1893, which forbids officers of the Treasury Department to furnish copies of the records of their office except "to such persons as may have a personal material interest in the subject-matter of the papers, or at their request," and then only upon furnishing "an affidavit setting forth the interest of the applicant, and showing the reason why, and the purpose for which copies are desired."

In the case under consideration, the department can see no objection to the local inspectors furnishing you with a copy of their decision in the case, and they will be instructed to do so, but must decline your request to be furnished with copies of the evidence taken before the local inspectors, you not having, as the department understands it, "a personal material interest" therein.

In view of the fact that the small size of the rooms in which inspectors are compelled to hold their investigations, which are frequently overcrowded with witnesses, counsel and others, directly interested in such investigations, makes it necessary to exclude all but the parties directly interested, and the further fact that all officers under charges are authorized by law to appear in person, as well as to be represented by counsel, would seem to make your characterization of investigations held by the local inspectors as "of a star-chamber nature," as wholly unwarranted by the facts in the case. Respectfully,

F. A. VANDERLIP, Assistant Secretary.

MR. WM. ARSTE Pub. of the Waterways Jour., St. Louis, Mo.

Rules and regulations fixing salaries of inspectors of steam vessels under act approved March 1, 1895, concerning the regulation of steam vessels.

TREASURY DEPARTMENT, August 10, 1900.

To supervising and local inspectors of steam vessels:

Under the provision of section 4414 of the Revised Statutes of the United States, as amended by the act of Congress approved March 1, 1895, it is provided that the salaries of the local inspectors of steam vessels shall be regulated in proportion to the number of steamers inspected in each of the various districts, as follows:

In districts inspecting 100 steamers and less, to a salary of $1,200 per year each.

In districts inspecting over 100 and less than 150 steamers, to a salary of $1,500 per year each.

In districts inspecting 150 and less than 200 steamers, to a salary of $1,800 per year each.

In districts inspecting 200 and less than 300 steamers, to a salary of $2,000 per year each.

In districts inspecting 300 and less than 500 steamers, to a salary of $2,250 per year each.

In districts inspecting 500 steamers and upward, to a salary of $2,500 per year each.

The act further provides that the basis of salaries from the date of approval of the act of March 1, 1895, shall be on the report of inspections for the preceding year, and thereafter according to the number of steamers reported inspected at the end of each fiscal year, which shall regulate the salaries for the following year for each local board, as reported by the Supervising Inspector-General.

Therefore, in accordance with the report of that officer for the fiscal year ended June 30, 1900 the salaries of local inspectors of hulls and local inspectors of boilers, from July 1, 1900, to June 30, 1901, inclusive, are hereby established as follows:

For the districts of Evansville, Ind.; Louisville, Ky.; Memphis, Tenn.; Nashville, Tenn.; Cincinnati, Ohio; Gallipolis, Ohio; Wheeling, W. Va.; Burlington, Vt.; Bangor, Me.; Galveston, Texas; Apalachicola, Fla., and Toledo, Ohio, at the rate of $1,200 per year for each local inspector.

For the districts of New Haven, Conn.; Savannah, Ga.; Charleston, S. C.; Dubuque, Iowa; Pittsburg, Pa.; Portland, Ore; Superior (Marquette), Mich.; Mobile, Ala., and Jacksonville, Fla., at the rate of $1,500 per year for each local inspector.

For the districts of St. Louis, Mo.; Oswego, N. Y.; New London, Conn.; Duluth, Minn.; Portland, Me.; Detroit, Mich., and Juneau, Alaska, at the rate of $1,800 per year for each local inspector.

For the districts of Puget Sound (Seattle, Wash.); Albany, N. Y.; Grand Haven, Mich; Port Huron, Mich.; Providence, R. I.; Milwaukee, Wis.; Cleveland, Ohio; Chicago, Ill., and Norfolk, Va., at the rate of $2,000 per year for each local inspector.

For the districts of Philadelphia, Pa.; Boston, Mass.; Baltimore, Md.; Buffalo, N. Y.; New Orleans, La., and San Francisco, Cal, at the rate of $2,250 per year for each local inspector.

For the district of New York, N. Y., at the rate of $2,500 per year for each local inspector.

Department Circular No. 119, dated July 24, 1900, is hereby revoked. L. J. GAGE, Secretary.

CREWS FOR GOVERNMENT VESSELS.

Shipping commissioners not authorized to charge for shipping crews for transports and colliers owned by the Government, but may co-operate in shipping such crews.—Instructions not applicable to chartered American vessels.

TREASURY DEPARTMENT, August 10, 1900.

SIR: Replying to your letter of the 9th instant, in which you inquire whether you are authorized to include in your accounts 31 seamen shipped on the collier Saturn, belonging to the Government of the United States, I transmit herewith copy of a letter of instructions dated September 12, 1898, governing the case. These instructions do not preclude your co-operation, when requested, with officers of the Army and Navy in shipping crews for transports, colliers, etc., belonging to the Government of the United States, for which you are not authorized to charge. Respectfully,

F. A. VANDERLIP, Assistant Secretary.

U. S. Shipping Commissioner, New York, N. Y.

TREASURY DEPARTMENT, September 12, 1898.

SIR: I return herewith your accounts for the month of August last. The papers show that in certain cases, as that of the Arizona and Scandia, you have charged for shipments on vessels belonging to the Government of the United States. This Department does not consider that such charges are warranted by the laws governing the matter. It is suggested, therefore, that you eliminate the items from the accounts which relate to shipments on vessels of the kind mentioned. It is probable that you will be able to ascertain which of the vessels in question are owned by the Government, by communicating with the collector of customs. These remarks are not intended to apply to vessels merely chartered. Respectfully,

O. L. SPAULDING, Assistant Secretary.

U. S. Shipping Commissioner, San Francisco, Cal.

REBUILT AND NEW VESSELS.

If any considerable part of the hull and skeleton of an old vessel, intact, is built upon, it is an old vessel rebuilt, not a new vessel.

TREASURY DEPARTMENT, BUREAU OF NAVIGATION,
WASHINGTON, D. C., August 10, 1900.

SIR: Referring to the application transmitted to you on 9th instant, by the managing owner of the steamer Atlantic, for a new official number and name for that vessel, I transmit herewith for your information copy of a decision of the United States district court, eastern district of Virginia.

The general principles of the decision govern awards of official numbers in the cases of vessels built in whole or in part from former vessels. Respectfully,

E. T. CHAMBERLAIN, Commissioner.

Collector of Customs, Detroit, Mich.

UNITED STATES DISTRICT COURT, EASTERN DISTRICT OF VIRGINIA.—AT NORFOLK, MARCH 13, 1876.

United States v. Steamer now called the Grace Meade.

It is the policy of the admiralty law to discourage changes in the names of vessels.

Admiralty courts, therefore, will go very far in ruling that rebuilt vessels are in law identical with those from the material of which they are built, and in requiring them to be registered in the same names.

Where any substantial portion of the frame or skeleton of an old vessel is built upon and preserved intact, in constructing the new, the courts lean toward holding the vessel to be the same in law.

But where no such part of the frame or skeleton is left intact, but each timber of the old vessel is first dislocated before being used in the new, in such case the vessel is a new, one, and may bear a new name, though having the model of the old vessel.

In Admiralty—Libel for Forfeiture.

The facts of the case are stated in the following decision of Hughes, J.:

The United States brings this libel, demanding forfeiture of the steam tug Grace Meade, for an alleged change of name, under the act of Congress approved May 5, 1864, passed "for the prevention and punishment of frauds in relation to the names of vessels" (Stat. L., vol. 13, pp. 63-4;

Rev. Stat., sec. 4179, p. 811). A vessel of the same model and partly of the same material, called the Agnes, had been blown up on the James river a few miles above City Point on September 10, 1872, and the Grace Meade was completed and registered in August, 1874. The officers of the government erroneously supposed that the Agnes had been towed from the James river to Baltimore and there rebuilt.

The facts were substantially as follows:

The steam tug Agnes was built at Bordentown, N. J., in 1870 and 1871. She was brought to Richmond late in 1871, and was there sold to Mrs. Grace G. Lawrence, as her separate property. Capt. Milton S. Lawrence, husband of the purchaser, became her master. While in charge of a tow, in September, 1872, a few miles above City Point, in James river, her boiler exploded, killing five men and sinking the vessel, which was considerably blown to pieces. Her sides were blown away, large openings were blown into both sides of her hull, the boiler was ruined, the engine much damaged, the hull broken into halves, the deck blown off from the engine room to the bow, most of the timbers of the vessel much shattered, all the ribs destroyed except three or four, the sternpost too much injured for reuse, and the wreck generally a very bad one.

The vessel was first raised about October 1, 1872, between two canal boats, and was then drifted into the flats above City Point. The object at the time was to take out of her such material as could be reused and such machinery as could be removed. All of the machinery was got out except the shaft, the engine frame and the wheel, which could not be removed. The vessel was then left lying on the flats until May, 1873. Then a railway was made and sunk, and the wreck was lightened and lifted upon the railway by means of chains suspended between two barges.

The model of the Agnes having been a very fine one, and that vessel very swift, it was the desire of Capt. Lawrence to build a new vessel on the same model. For this purpose all the old timbers which could be found were gathered up, and these, as well as those already in the vessel, were tacked and battened together, so as to obtain in outline the model of the Agnes as nearly as practicable. The new vessel was built to the outline thus secured, molds being taken from the old timbers for the new ones, and once in a while the old timber used in the new vessel where it was sound and unshattered.

During the construction of the new vessel, the old shaft, wheel and engine frame, which the wreckers had in the fall before been unable to remove, were left as they had been in the Agnes, and the new boat was built to them in their old relative position.

In short, the model and general plan of the Agnes were studiously adopted and followed in building the Grace Meade, and the bulky machinery left, as just stated, in its old positions.

Other parts of the old vessel were used as follows: The old stem was used, but was changed by deepening the rabbet for thicker planking. A new scarf was cut in it and its upper part cut off and a new arch scarfed on it. A new keel was put in and scarfed to the stem, and the sternpost was set into a piece of the old keel 6 or 8 feet long, and the new keel scarfed to that. Three new keelsons were put in—the Agnes had but one. The frame of the Agnes had been one-half of chestnut and one-half of white oak. Of these timbers only such few of the white oak ones as had not been shattered by the explosion were used. The planking was all new except a third of the garboard strake on the starboard side. Of the eight old beams only two were used in the Grace Meade. Of the deck only a small part of the floor of the after-cabin was made of the old timber. Of the 60 old stanchions only three were reused. The old waist was not used. Of the loggin around the stem only half of the old was reused. The old transom was first used and then discarded. The old samson post forward was used and the old bits.

All the old timbers that were put into the new vessel made up an aggregate of some 1,200 feet, the whole number of feet of timber used in the new vessel being upward of 30,000. The new vessel was completed at City Point in the summer of 1874, and Capt. Lawrence brought her to Norfolk and applied to the Collector of Customs here for registration as the Grace Meade in August.

It seems that while the Agnes was in the James river trade, Mr. Currie had been her agent in Richmond down to the time of her sinking by the explosion of September, 1872. It seems also that while the new vessel was in progress of construction at City Point, Mr. Currie applied to the Collector of Customs at Richmond for the registration of the new vessel in the name of the Grace Meade. The Collector had written for instructions to the Secretary of the Treasury, stating in his letters that the Agnes had been towed to Baltimore and there rebuilt. Upon this statement the Secretary had declined to allow the registration in the new name, as without authority of law.

The motive of Capt. Lawrence in desiring the name Grace Meade to be given the vessel was that that had been the maiden name of his wife, who, greatly shocked by the disaster that had befallen the Agnes, had soon after died. There was no claim against the Agnes of any sort, and it is not pretended that there was any motive inducing Capt. Lawrence to desire the name Grace Meade to be given his vessel except the one which has been mentioned. There is no charge or suspicion of fraud.

When Capt. Lawrence applied in 1874, at Norfolk, for the registration of the vessel, the special agent of the treasury here, Mr. Ira Ayer, Jr., instituted an inquiry into the facts of the explosion of the Agnes, the building of the Grace Meade, and the attempt which had been made a year before at Richmond for registering the vessel in the new name. The result of the inquiry was to convince the officers here that the vessel could lawfully be registered as the Grace Meade, and papers were accordingly given her, dated August 4, 1874

This libel was brought February 20, 1875, and I am to decide upon the case as presented, whether the vessel is forfeitable under the act of Congress of May 5, 1864.

First. In point of fact it cannot be pretended that the Grace Meade is the same vessel as the Agnes. True, the model is the same, but one egg may fit into the mold of another without being the same egg. True, one-twentieth or one-thirtieth of the timber of the Agnes was used in constructing the Grace Meade, but it would be idle to pretend in point of fact the use of so small a portion of the material of one vessel made the new one the same as the old. The fact of the machinery being in great part the same in the two vessels has no bearing upon the question of indentity, it never having been pretended that the successive use of machinery by two vessels identified the vessels themselves as the same.

Second. The real inquiry is, whether in point of law the Grace Meade is a new vessel, or the old Agnes rebuilt. The policy of maritime law, for reasons so obvious that they need not be stated, is very strongly to discourage a change in the names of vessels. Accordingly it is held that a vessel, which in the course of time has undergone repairs to such an extent that her old material may have entirely disappeared and been replaced by other material, is still in law the same vessel. And generally it may be held as a principle, that, where the keel, stem and sternposts, and ribs of an old vessel, without being broken up and forming an intact frame, are built upon as a skeleton, the case is one of an old vessel rebuilt, and not of a new vessel. Indeed, without regard to the particular parts reused, if any considerable part of the hull and skeleton of an old vessel in its intact condition, without being broken up, is built upon, the law holds that in such a case it is the old vessel rebuilt, and not a new vessel.

But where no piece of the timber of an old vessel is used without being first dislocated and then replaced, where no set of timbers are left together intact in their original positions, but all the timbers are severally taken out, refitted and then reset, there we have a very different case. That is a case of a vessel rebuilt. There it is of little consequence how much of the old timber is used. If none of the old timber is left undisturbed, if all of the timber used, whether old or new, is taken up, refitted and reset, as was the case in rebuilding the Grace Meade, then I think the case is presented of a vessel built anew, and not of an old vessel rebuilt.

I think it is clear from the evidence that not one piece of the Agnes was used in the constructon of the Grace Meade, without having been first taken up and handled, before being placed in its present position. No part of the frame of the Agnes, not even the smallest, was used as a frame in the Grace Meade. I am clear, therefore, in the opinion that the Grace Meade was a new vessel, and not identical with the Agnes in the legal sense of the identity of vessels.

Third. I think, moreover, that where the proper officers of the United States, after a full investigation of the facts of the building of a vessel, and where there is no fraud or concealment on the part of the owner, conclude that a vessel may be registered in a given name, a Court of Admiralty ought not to look with favor upon a libel for the confiscation of that vessel for bearing the name in which the government itself registered her.

I will sign a decree dismissing the libel at the cost of the United States.

ROUTES OF STEAMERS.

Steamers subject to penalty for not navigating routes stated in inspection certificates.

TREASURY DEPARTMENT, August 9, 1900.

SIR: The department is in receipt of your letter of the 26th ultimo, in the matter of the steamer Montauk being navigated with passengers on a route outside and more dangerous than that specifically stated in the steamer's certificate of inspection.

In reply to your statement that you are unable "to determine what specific section of law, if any, has been violated" in the case referred to, you are informed that the route of a steamer, stated in a certificate of inspection of a steam vessel, is a lawful restriction of the navigation of the vessel to the route specified therein, and that a departure therefrom would subject the vessel to the penalties prescribed in sections 4499 and 4500, Revised Statutes. In view of the fact, however, that since the violation referred to the local inspectors have extended the route of the steamer Montauk to cover the waters previously illegally navigated, the department would advise that no further action be taken in this particular case.

Respectfully,

F. A. VANDERLIP, Assistant Secretary.

COLLECTOR OF CUSTOMS, Providence, R. I.

PROPOSALS FOR PATROL BOAT.

The Ohio Fish and Game Commission will receive bids for the construction of a patrol boat for Lake Erie.

Plans and specifications may be had on application to the Secretary of above Commission, Athens, Ohio.

Sealed bids will be received up to 12 o'clock noon, Chittenden Hotel, Columbus, Ohio, September 4th, 1900.

All bids should be mailed to the Secretary Ohio Fish and Game Commission, Chittenden Hotel, Columbus, and any other correspondence to same address, Athens, Ohio.

The Commission reserves the right to reject any or all bids. 32–33

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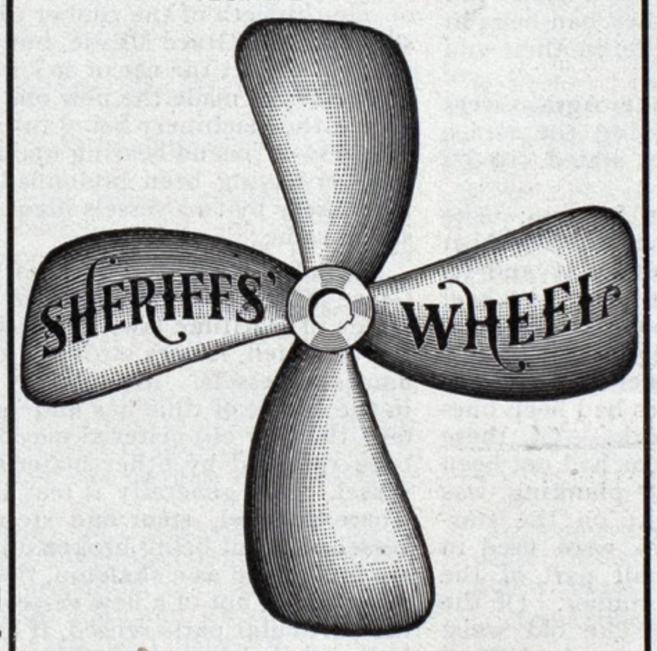

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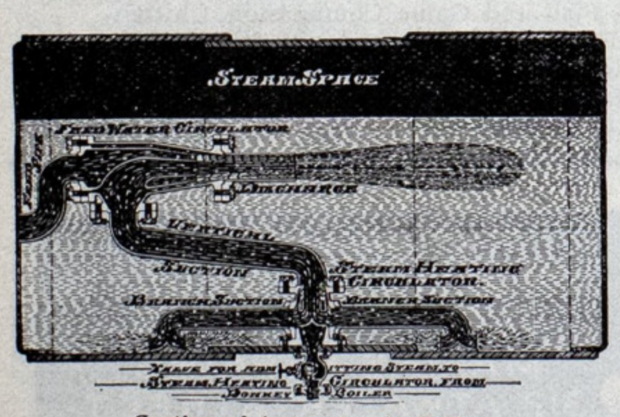

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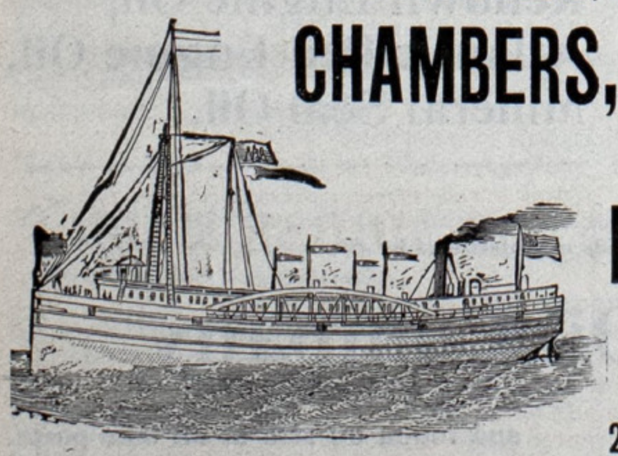

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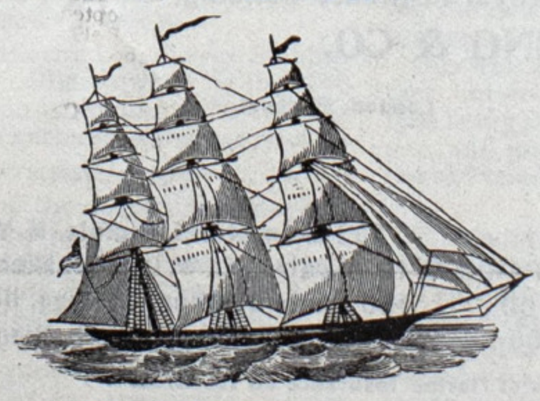

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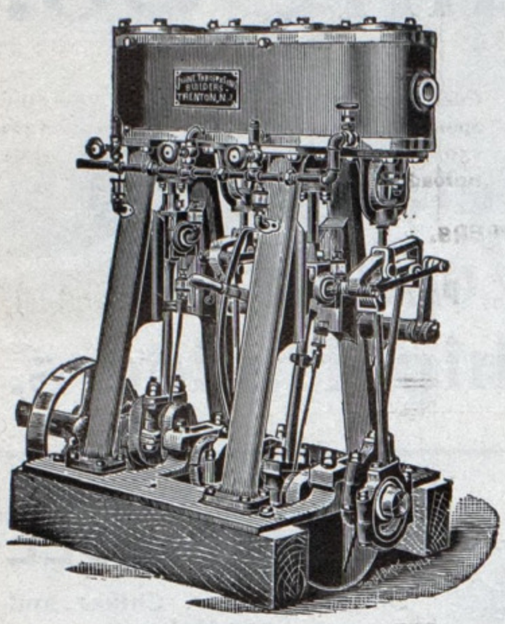

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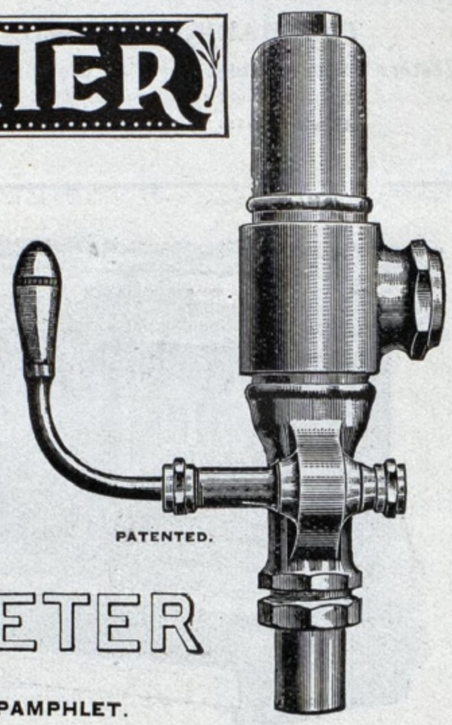

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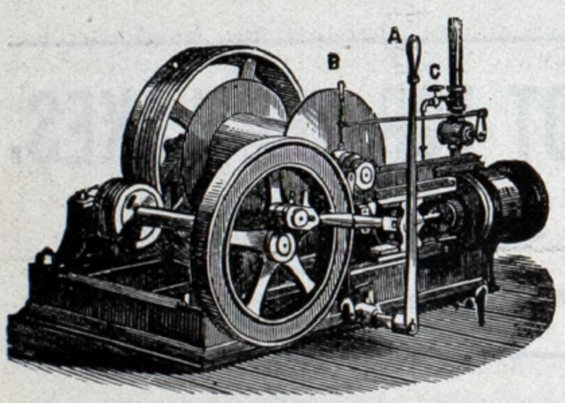

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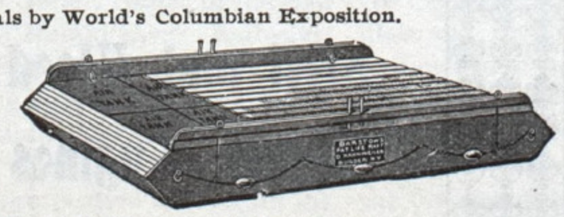

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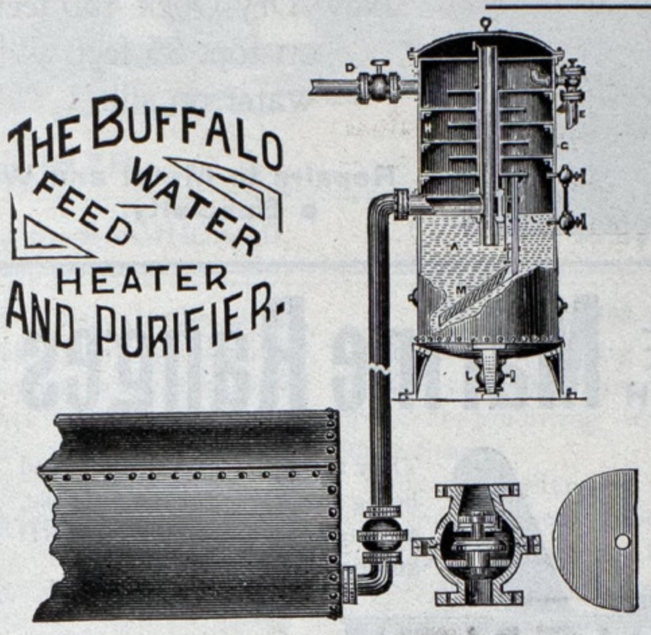

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U. S. ENGINEER OFFICE, Pittsburg, Pa., August 16, 1900. Sealed proposals for completing two locks and dams and building four locks and dams on Monongahela river above Morgantown, will be received here until 12 M., September 15, 1900, and then publicly opened. Plans may be seen here. Information furnished on application. C. F. POWELL, Maj., Engrs. 34–37

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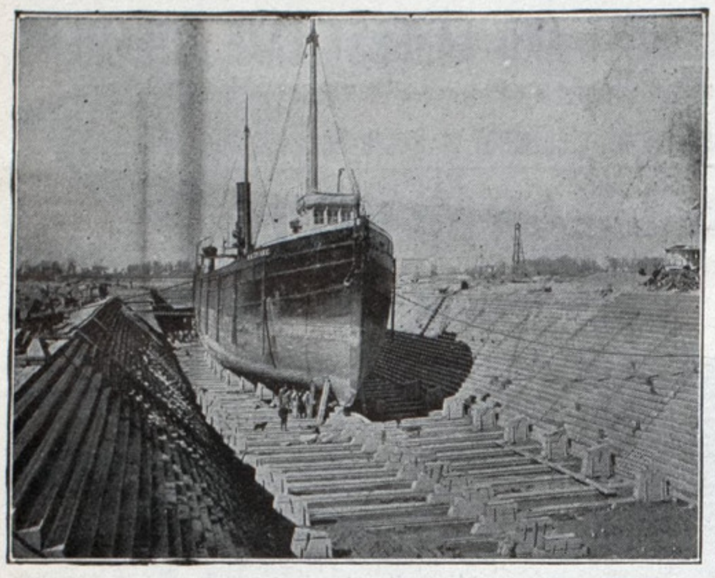

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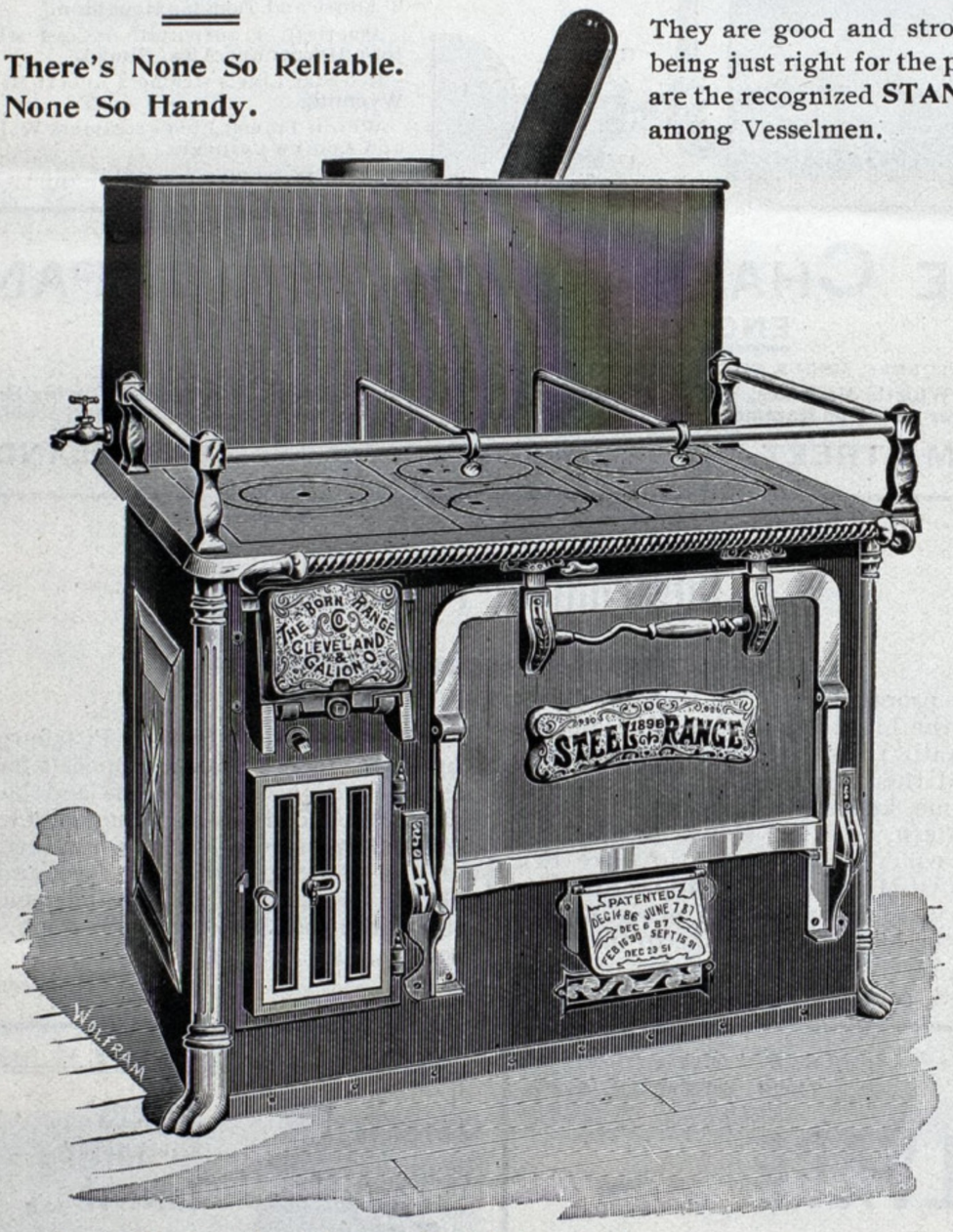

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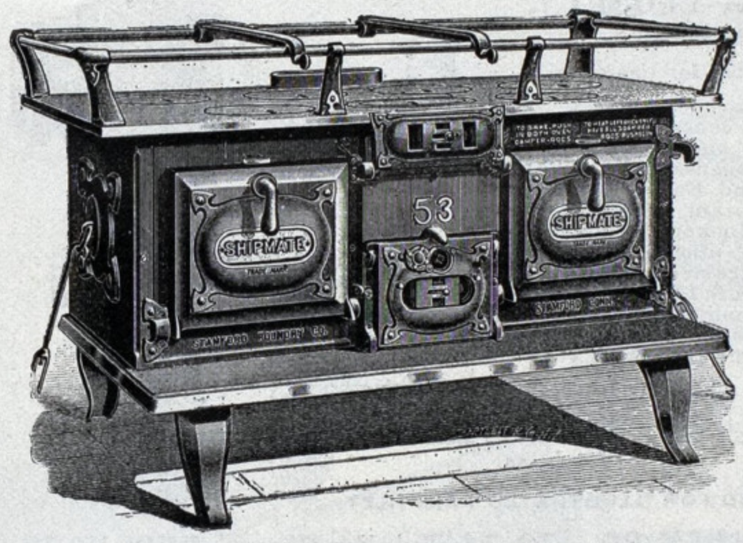

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